

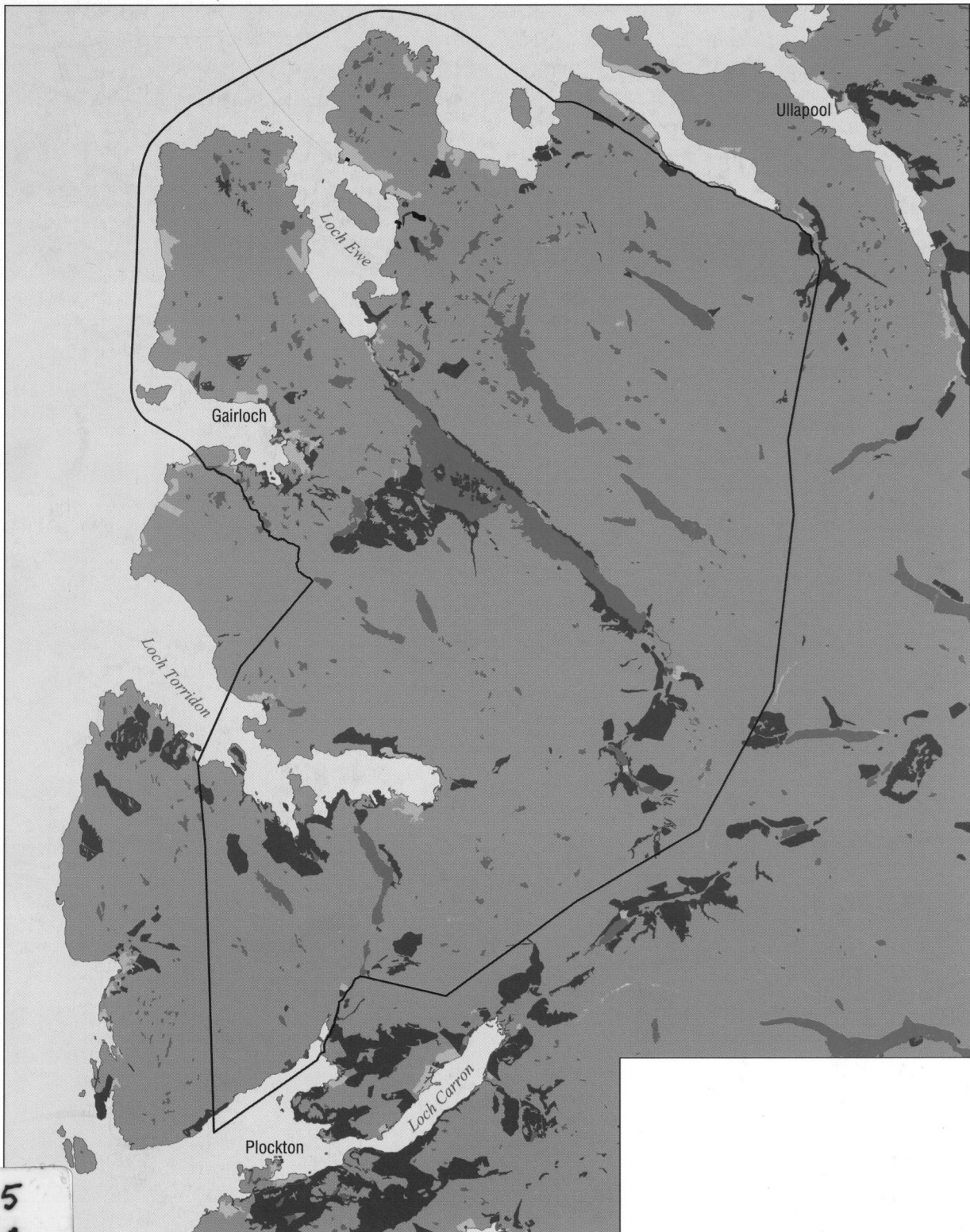


Royal  
Commission on the  
Ancient and  
Historical  
Monuments of  
Scotland

HISTORIC SCOTLAND



# The Historic Land-use Assessment of Wester Ross



A1.5  
HLA

A Report by  
the Royal Commission on the Ancient and Historical Monuments of Scotland  
and Historic Scotland

Preface

The Historic Land-use Assessment Project is a study of the  
and Historical Monuments of Scotland and Historic Scotland  
carried out by Kevin Clark, Carolyn O'Neill and Stuart  
and analysis for this report was carried out by  
and Simon Farrow. The illustrations were prepared  
prepared by John Stoddart.

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of State on the protection and management  
of the historic environment in Scotland.

# The Historic Land-use Assessment of the Wester Ross National Scenic Area

A Report by the Royal Commission on  
the Ancient and Historical Monuments  
of Scotland and Historic Scotland



RCAHMS

NMRS

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*Historic Land-use Categories of the Wester Ross National Scenic Area.*

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*Aerial view of the bay at Applecross showing the interplay of mountain upland pasture and cultivated land typical of the Historic Land-use of Wester Ross. SC 769684*

## Preface

The Historic Land-use Assessment Project is jointly managed and funded by the Royal Commission on the Ancient and Historical Monuments of Scotland and Historic Scotland. The desk-top survey on which this report is based was carried out by Karen Clarke, Caragh O'Neill and Allan Kilpatrick under the supervision of Piers Dixon. The research and analysis for this report was carried out by Caragh O'Neill. The text was prepared by Caragh O'Neill, Piers Dixon and Sarah Govan. The illustrative work was undertaken by Caragh O'Neill and Georgina Brown, and the layout was prepared by John Stevenson.

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## Background to the Historic Land-use Assessment

The Historic Land-use Assessment (HLA) of the Wester Ross National Scenic Area (NSA) was carried out by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) with the support of Historic Scotland. The catalyst for this work was the decision by Scottish Natural Heritage to prepare a Management Strategy for the National Scenic Area (NSA) designation in Wester Ross. It was considered important that the human contribution to the shaping of the landscape should be adequately presented and accommodated in this exercise. Reflecting the approach in the draft NSA management strategy, however, the area covered by this study was more extensive than the NSA itself. Consequently, this report summarises the results of the HLA mapping of Wester Ross NSA in its broader local context.

HLA is a technique that was developed in Scotland for assessing the human impact upon the landscape. Its methodology was inspired by the Historic Landscape Character Assessment of Cornwall, but the methods have been adapted substantially for the Scottish context (Cornwall County Council 1996, Herring 1998, Fairclough *et al.* 1999, Dyson Bruce *et al.* 1999, Dixon and Hingley 2002).

Historic Scotland and the RCAHMS first established the HLA Project in October 1996. It is a partnership venture to develop and implement a methodology for assessing historic land-use patterns in Scotland. A Steering Group involving a wide range of organisations and individuals oversees the project, including representatives of the Forestry Commission, Scottish Natural Heritage, and Local Authorities and the National Trust for Scotland. The work is undertaken in Edinburgh by RCAHMS on the platform of their Geographical Information System (GIS), and data collection for Wester Ross was completed in July 2002.

## Summary Description of Methodology

Today's landscape contains a record of human impacts or events upon its surface. HLA characterises and maps these events at a scale of 1:25,000 using the Ordnance Survey (OS) Pathfinder maps as its base, the smallest scale at which the topographic detail is adequately depicted. The assessment is a broad-brush exercise, which involves outlining sets of areas that have common characteristics. These are defined as Historic Land-use Types, each of which has both a chronological period, i.e. the period when it was established, and a general land-use category, based on geographical principles, to aid the presentation of the results. For example, the Fields and Farming category comprises eight Historic Land-use Types (see Appendix), four of which are 18th to 19th century in date, while the others are more modern in period, but all are related to agricultural activity which has left its mark upon the landscape. The interpretation and mapping process involves the systematic assessment of topographic OS maps, archaeological and historical data in the National Monuments Record of Scotland (NMRS), the Land Cover Map of Scotland (MLURI 1993) and vertical aerial photographs.

In addition to the Historic Land-use Types, relict Historic Land-use features or archaeological remains are incorporated into the map, distinguished as Relict Types. The organising principle is that all areas of the landscape must be categorised as having a Historic Land-use Type, i.e. a land-use characteristic of a particular period. Additionally, there are some areas which also display traces of previous land-use. Where this occurs there will be a Historic Land-use Type, which is always the dominant influence of the present day appearance of the landscape, and a Relict Type. Indeed, because of the complexity of the landscape, there may be up to three Relict Types in any given area. The distinction between the two may be defined thus:

*Historic Land-use Types* - reflecting historic land-use types in current use, which may include types that are in origin several hundred years old or may be of relatively recent origin, and

*Relict Land-use Types* - reflecting historic land-use types that are no longer 'active' or maintained for their original purpose, but have left a visible trace in the landscape, and also relict archaeological landscapes that are extensive enough to be mapped at the resolution of the HLA method.

A glossary of terms has been compiled, which includes 52 Historic Land-use Types grouped under 14 Historic Land-use Categories (see Appendix), and 32 Relict Land-use Types grouped into 16 Categories, of which four are exclusively archaeological, i.e. having no modern equivalent. The remaining 12 Relict Categories overlap with the Historic Land-use Categories: an

## The HLA and Management of the Landscape

illustration of the constantly changing face of the historic landscape. For example, the fields of the improvement period are in many cases part of the modern framework of fields, but in some areas these fields have been abandoned and the ground turned to rough grazing. Where the fields are still in use they are identified as Historic Land-use Type Rectilinear Fields of the 18<sup>th</sup> and 19<sup>th</sup> centuries. Where they have been abandoned, the Historic Land-use Type is Rough Grazing and the Relict Type is Rectilinear Fields of the 18<sup>th</sup> and 19<sup>th</sup> centuries. For many of the archaeological landscapes the main source is the National Monument Record of Scotland, but in large areas of Scotland where no recent survey (i.e. since 1985) has been done, aerial photographs become more critical as a source. In addition, a validation process that involves ground visits to check information and interpretation is built into the project.

The scale of data capture has the disadvantage that any feature less than one hectare in extent is too small to map. Groups of structures are included using a yardstick, for example, of at least five shielings or three hut-circles per hectare, but many individual archaeological sites do not show up on the maps that are produced. Information on small sites, however, can instead be added to the GIS from the NMRS or local sites and monuments records (SMRs), and therefore used in conjunction with HLA.

The resulting composite map is entered into GIS to produce topologically correct maps. The digitising is executed using the OS Basic Scale digital map as a base. Polygons are tagged with the historic land-use reference number and attached to an up-to-date copy of the database, so that analyses can be carried out textually. Once completed, the map can be accessed on a PC-based browser called ArcView. The maps may then be combined with other datasets, including site data from the NMRS or SMRs, for further interrogation and analysis. Interpreted data of this sort on Historic Land-use, Relict Land-use and the survival of field patterns are not available from other sources, which makes this a unique resource in Scotland.

HLA originally identified Coniferous Plantations and Managed Woodland as the main woodland and forestry types. Recently, Late 20<sup>th</sup> Century Woodland Plantations were added after consulting the Forestry Commission's Digital Woodland Map for Scotland. This map includes planting undertaken since 1988, as well as areas notified under Woodland Grant Schemes. It should be noted that although the polygons show that trees are present within each area, trees do not necessarily cover the whole polygon.

In Wester Ross, it was decided to continue the practice of mapping deserted settlements located within forestry plantations, where those features are depicted on the current OS map.

The HLA provides information on the nature of land-use through time. It helps users recognise the ways in which the countryside reflects how people have exploited and changed their physical environment and adapted to it through time (Fairclough, Lambrick and Hopkins 2002, 69). It also helps us to understand the processes behind the formation of the current landscape and its present character. It is not the purpose of HLA to select particular areas for protection from change or for special management of historic elements, though it can assist with that process. Rather, the HLA helps identify the historical character of today's landscape and the key elements that help us to understand the continuity and change that have brought us to the present. In doing so it can inform management decisions, ensuring that they are taken in full knowledge of their implications for the historical context of the area. The following summaries try to draw out the historical character of the area and to highlight key elements. They also offer some suggestions about their implications for management. Through informing management and change, the HLA can help ensure that the modern landscape continues to reflect its rich historical legacy, thereby enhancing a sense of place.



## Commentary on the Historic Land-use Assessment of the Wester Ross National Scenic Area

The Wester Ross National Scenic Area encompasses some of the most stunning, land- and sea-scapes in the UK. It is an area of rugged mountains with remote lochs and a rocky coastline. This relief has imposed a number of limitations on the options for land-use from earliest times to the present day. The present landscape, from the highest peaks to the inter-tidal zone, has been affected by the hand of man, but there is little evidence for human habitation above about 300m, though, doubtless, the higher tracts of land were exploited for grazing and hunting. This has resulted in a relatively narrow band of ground which contains the greater part of the imprint of man's activities over the past nine thousand years.

In historic land-use terms, the area is dominated by Rough Grazing and Moorland, particularly inland away from the coast. Below 300m traces of human activity become more frequent and varied, including most of the archaeological evidence for prehistoric and medieval settlement. Most modern settlement, i.e. that dating from the last 200 years, lies below 150m and is dominated by crofting communities. Of the elements that date to the 20th century, a significant proportion of ground has been turned over to Conifer Plantations, while the Forestry Commission's Woodland Grant Scheme established after 1988 (recently replaced by the Scottish Forestry Grant Scheme) has already made a significant impact on the landscape by the creation of Woodland Plantations. Nevertheless, pockets of earlier woodland and designed landscapes of 18th and 19th century origin have survived.

Wester Ross is an area in which archaeological fieldwork has been limited. There have been recent finds of hut-circles in the Gairloch area indicating something of the dispersed pattern of prehistoric settlement extending beyond the crofting and pre-crofting settlements, but this evidence is mostly too scattered and small to be mapped by this exercise. On account of their limited extent, few shieling sites were mapped for the present HLA survey, but enough have been recorded to indicate the potential extent of the pattern (see map 6). The ironworks at Fasagh on Loch Maree and the signs of coppicing in the oak woodland suggest that there should be charcoal-burning platforms somewhere, but none have yet been found. The relative absence of the scrub woodland in the area is probably related to the grazing of domestic animals over the centuries, reducing survivals to small pockets and preventing regeneration.

The importance of the coastal areas was considered in the Historic Land-use Assessment, as crofting and fishing activities exercise a significant effect of the Wester Ross scenery. However, while the marine fisheries and aquaculture industry of Wester Ross are an important source of employment, these do not lend themselves to a land-use assessment. Aquaculture

## Summary Description of Methodology

concerns are dominated by a small number of operators, and fish farms are located throughout the sea lochs. These are generally not mapped by HLA, as they are transient in nature and small in area; an exception is the large hatchery at Coudoran. Pre-modern fishing is represented by features such as relict fish-traps, e.g. at Applecross, Torridon, Kishorn and Gairloch, but the scale of modern industrial fishing activity in the area is not evident from the HLA, as the land used for this purpose is relatively limited. This emphasises the point that economic activity does not always occupy a land area commensurate with its importance.

Land used for agriculture is generally located either around the coast or on the valley floors of the more gently-sloping glens and straths. What agriculture there is in Wester Ross today is principally based on crofting with, in addition, some sheep farming; a pattern of land-use which was established in the late eighteenth and nineteenth centuries. The impact of earlier, pre-improvement, land-use upon the present landscape, however, is evident in several ways. Many of the crofting townships developed out of existing pre-improvement settlements, such as at Toscaig, while the remains of abandoned pre-improvement townships may survive either in areas of modern rough pasture, e.g. at Shildaig, or even in modern forestry plantations.

The impact of modern changes in land-use is most apparent along the coast, taking the form of expanding residential zones, new golf courses, burgeoning caravan parks and the provision of other recreational facilities. These developments impinge on traditional forms of land-use, particularly in the crofting landscapes, and add increased pressure on the other elements of the historic landscape, as well as on individual archaeological sites and monuments.



*Liathach from the east. Much of the Wester Ross National Scenic area is characterized by dramatic scenery. SC 396098*



*This view shows the former crofting township of Slaggan. Much of the agriculture in Wester Ross has been dominated by this type of settlement. SC 771320*



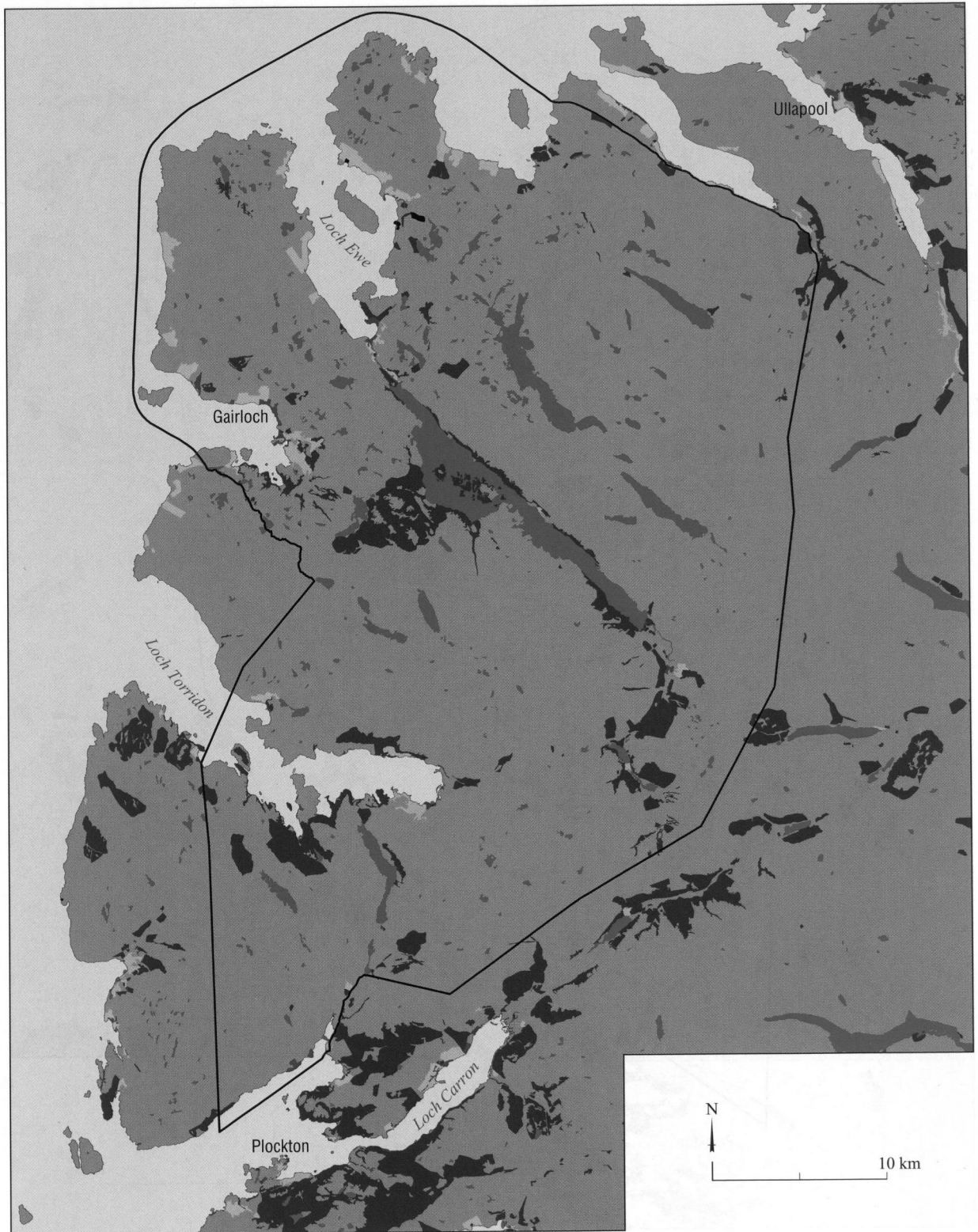
## HLA by Category: The Anatomy of a Historic Landscape
















By simplifying the data (Historic Land-use Types) into Historic Land-use Categories the information generated by this assessment can be used to summarise the general characteristics of land-use in Wester Ross. Four categories - Forestry and Woodland, Crofting, Fields and Farming and Moorland and Rough Grazing - encompass by far the greater part of the landscape and, with the Water Bodies, give character to the area. It is important to understand the different qualities of these four categories, and the way in which they are inter-related, both in terms of the present landscape and relict survivals. For example, most woodland and forestry plantations occupy former rough grazing areas, and often the best ground for forestry outside the existing fields and crofts is also the land that was once occupied by and worked by prehistoric and medieval communities. This is the land that was finally turned to rough grazing at the time of the Clearances when the crofts were allotted.

In taking this Land-use Category approach, management issues and opportunities for each category can be identified. The Categories are ordered in the following text by the number sequence found in the Glossary (see Appendix) and not in order of importance or extent. Where appropriate, the NMRS reference number of a site has been given in brackets, e.g. (NG64NE 1).



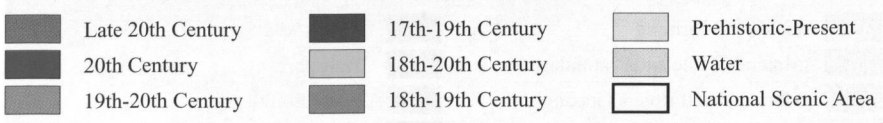
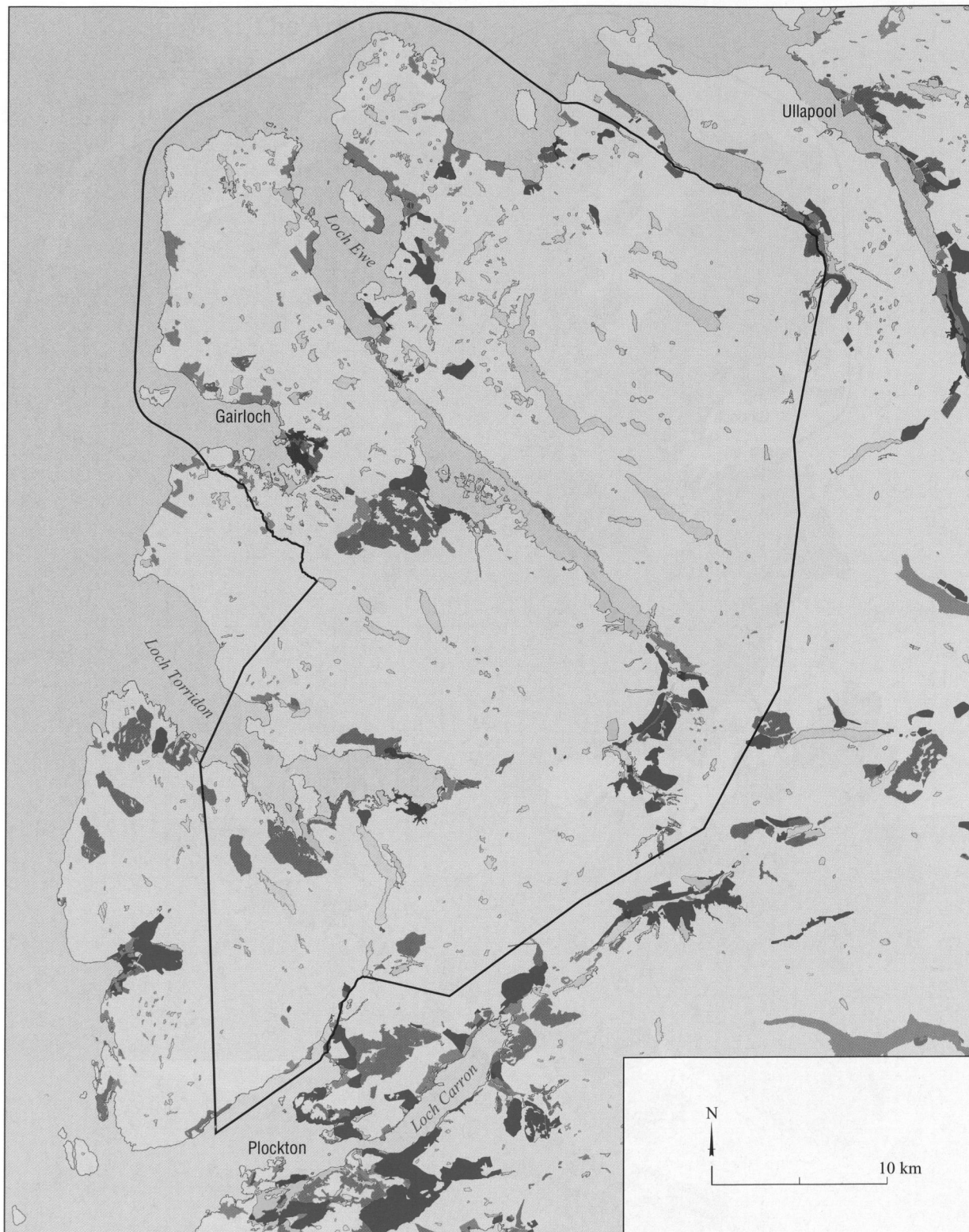
*View looking north-west along Loch Maree. This illustrates some of the typical scenic qualities of the landscape of Wester Ross. Note the area of Managed Woodland on the shores of Loch Maree indicating human impact in the area (see Woodland and Forestry p.19). SC 771700*



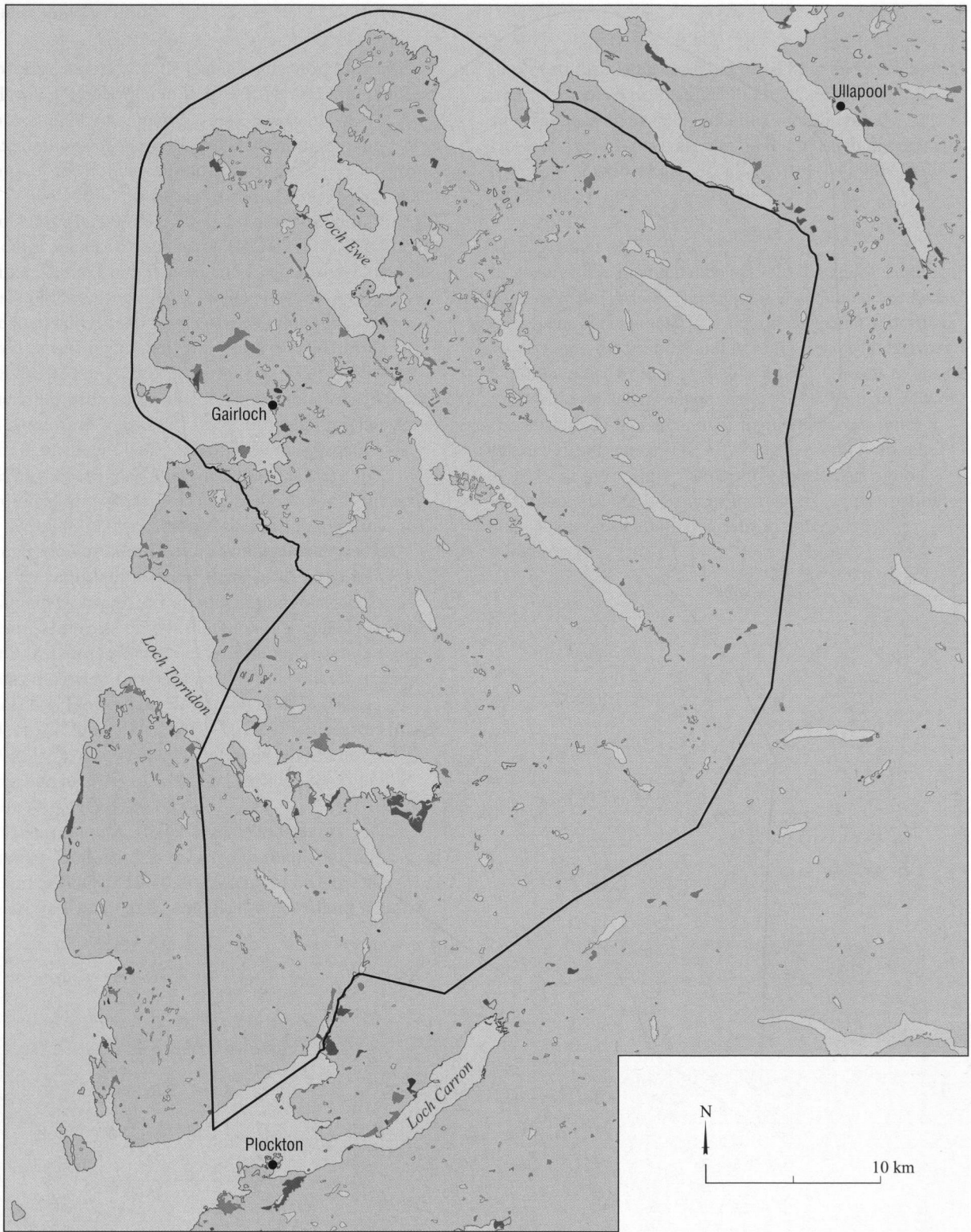
- |   |                         |   |                                    |  |                       |
|---|-------------------------|---|------------------------------------|--|-----------------------|
|  | Built-up Area           |  | Fields and Farming                 |  | Ritual Area           |
|  | Crofting                |  | Mineral, Waste and Peat Industries |  | Transport             |
|  | Defensive Establishment |  | Moorland and Rough Grazing         |  | Water Body            |
|  | Designed Landscape      |  | Planned Village                    |  | Woodland and Forestry |
|  | Energy Establishment    |  | Recreation Area                    |  | National Scenic Area  |

Map 1 Historic Land-use Categories of the Wester Ross National Scenic Area.





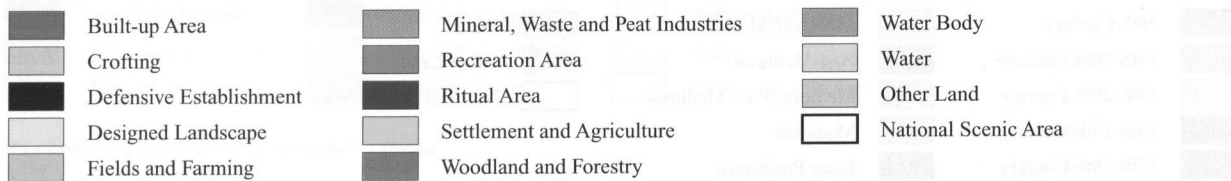
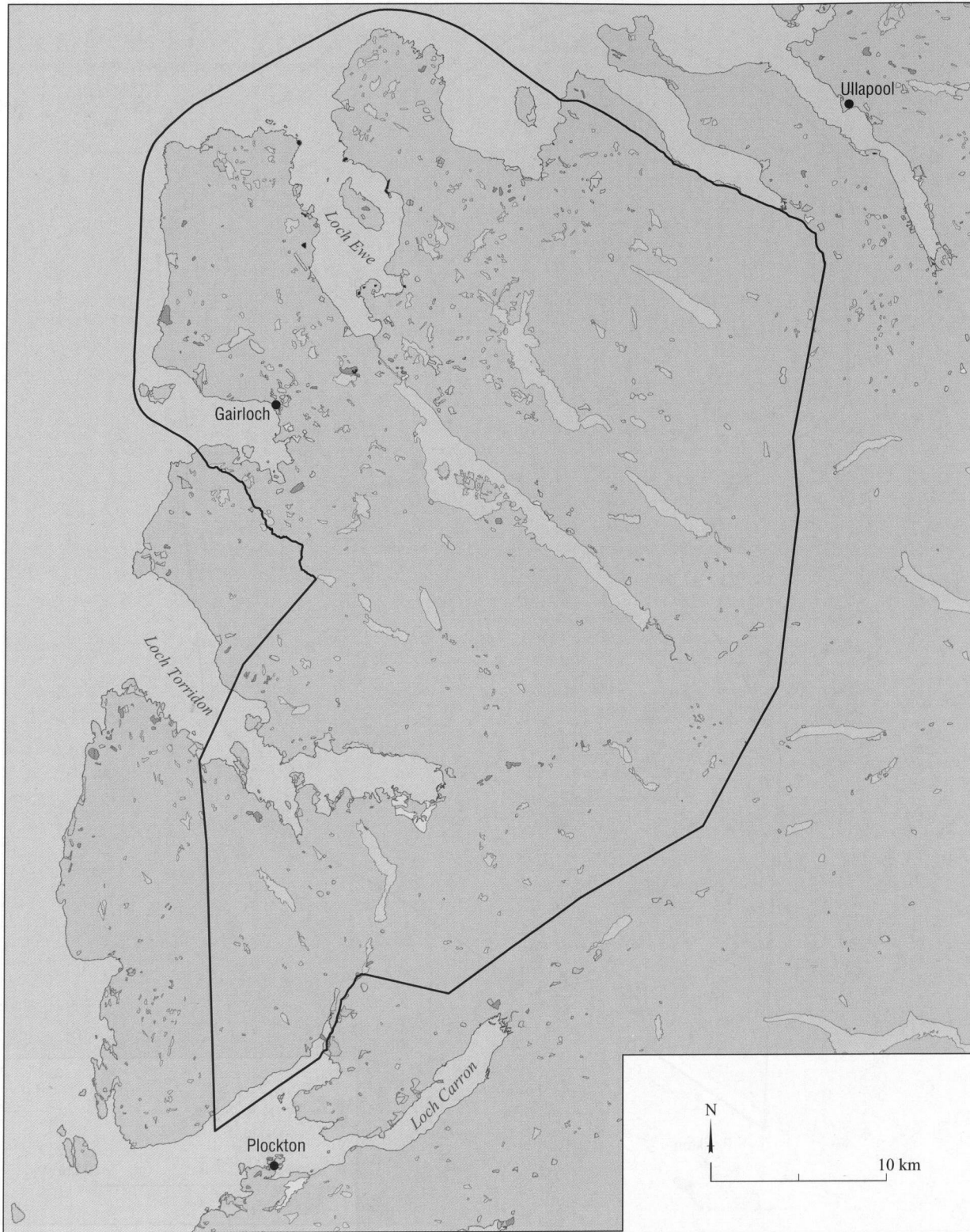
Map 2 Historic Land-use areas grouped by Period.



- |   |                   |   |                        |   |                      |
|---|-------------------|---|------------------------|---|----------------------|
|  | 20th Century      |  | Medieval-Modern        |  | Water                |
|  | 19th-20th Century |  | Post-Medieval          |  | Other Land           |
|  | 18th-20th Century |  | Medieval/Post-Medieval |  | National Scenic Area |
|  | 18th-19th Century |  | Medieval               |   |                      |
|  | 17th-19th Century |  | Later Prehistoric      |   |                      |

Map 3 Historic Land-use Assessment: Relict Areas grouped by Period. The most common relict features date from the Medieval and Post-medieval periods and are concentrated along the coastal areas and glens.





Map 4 Historic Land-use Assessment: Relict Areas grouped by Category. This highlights the land-use origins of all the relict categories.

## 1. Fields and Farming

Improvement period 18th-19th Century Rectilinear Fields are not common in Wester Ross and, where they are present, they are mainly small in extent. Concentrations of these fields can be found in the vicinity of the policies of the estate house at Applecross (NG 7160 4550), at the eastern end of Loch Maree near Kinlochewe (NH 0310 6188), and at the head of several sea-lochs, such as Strathcarron (NG 9378 4270), Loch Torridon, Little Loch Broom and Loch Kishorn, and on the Isle of Ewe. Rectilinear Fields are commonly associated with sheep farms, which often replaced cleared townships in the 19th century, e.g. Udrigle (NG89SE 15) or Redpoint Farm (NG 7320 6830).

There has been some attrition and alterations to these field patterns as a result of later 20th-century changes in farming practice. These include the amalgamation of fields as modern machinery has made it more economical to work larger field units. Around Aultbea (NG 8750 8841), for example, there is a noticeable concentration of 20th Century Amalgamated Fields. These are unusual in Wester Ross, as the area is dominated by rough terrain making large-scale mechanisation and crop production difficult. There are several instances where New Fields have been laid out in areas that were formerly part of the policies of estate houses, e.g. Flowerdale House (NG87NW 7), Applecross House (NG74NW 13) and Letterewe House (NG97SE 2); elsewhere, New Fields have been established in areas of what had earlier been rough pasture (e.g. NG 8120 6020).

For the most part, Relict 18th-19th Century Fields survive on land that has reverted to rough pasture, e.g. at Tornapress (NG 8350 4050). As might be expected, there are few relict archaeological types found within

improved farmland; repeated ploughing and agricultural improvements have resulted in many archaeological sites in these areas being levelled or obliterated. However, relict survivals can be found, such the deserted township at Arineckaig, Strath Carron (NG 9855 4578, NG94NE 3).

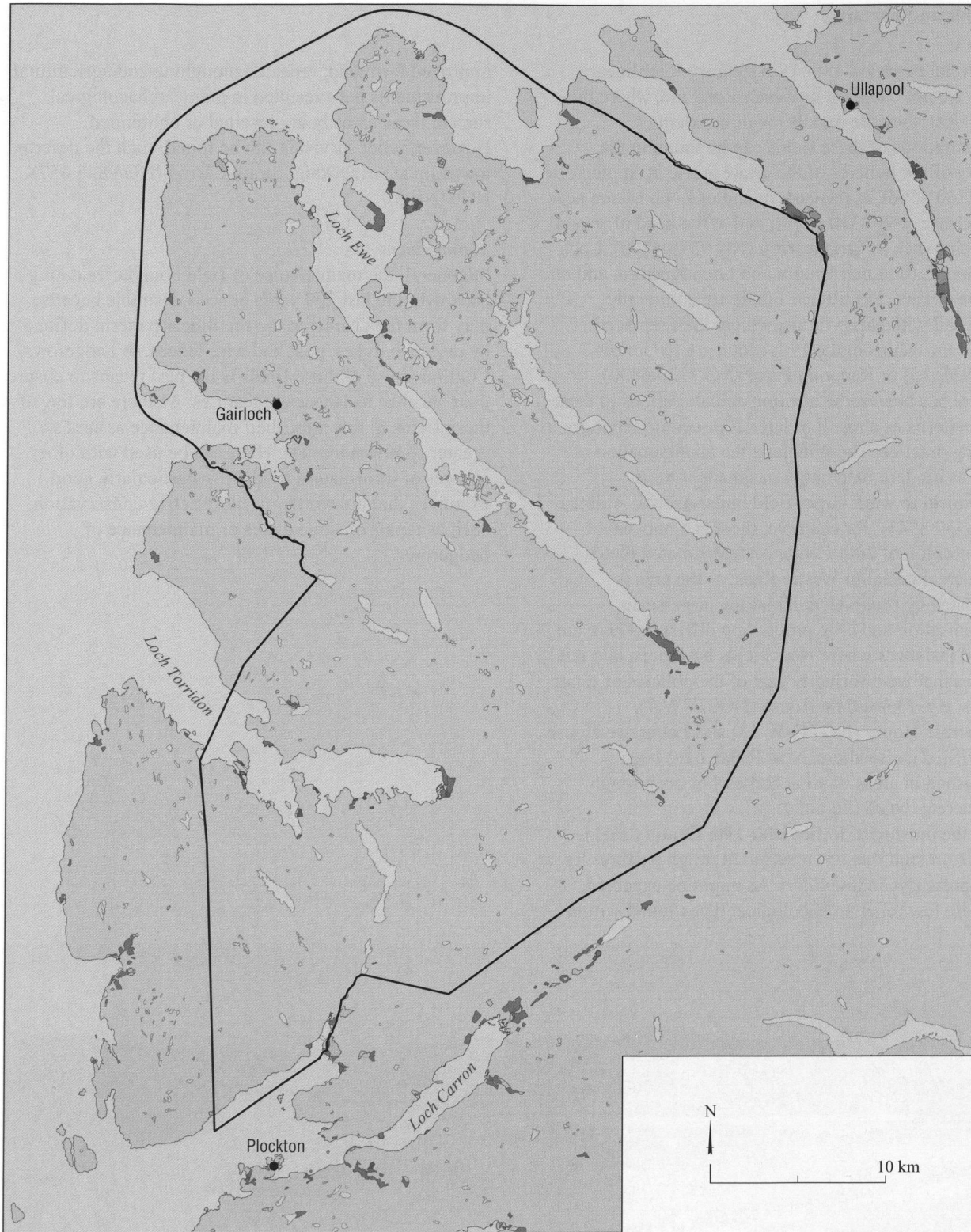
### *Management*











In general, the maintenance of field boundaries dating back over the last 200 years or so is desirable because they form the characteristic rectilinear pattern, defined by drystone dykes, post and wire fences, or hedgerows. Continued use of these fields is the best means to ensure their survival as landscape features. As there are few of these fields in this area, their maintenance assumes a greater significance. The HLA can be used with other sources of information to identify particularly good examples that are worthy of more active conservation, such as repair of stone dykes or maintenance of hedgerows.



*This anti-aircraft battery lies within the 18th-19th century rectilinear fields at Tournai. SC 771319*





- |   |   |   |   |
|---|---|---|---|
|  | Late 20th Century Unenclosed Improved Grassland |  | Relict 18th-19th Century Rectilinear Fields |
|  | Late 20th Century New Fields                    |  | Relict Areas in Fields and Farming          |
|  | 19th-20th Century Amalgamated Fields            |  | Water                                       |
|  | 18th-19th Century Rectilinear Fields            |  | Other Land                                  |
|  | 18th-19th Century Planned Rectilinear Fields    |  | National Scenic Area                        |

Map 5 Historic Land-use Assessment: Fields and Farming.



- Designed Landscape
- Fields and Farming
- Moorland and Rough Grazing
- Recreation Area
- Ritual Area
- Woodland and Forestry

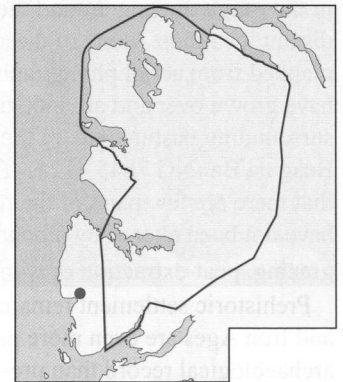


Fig. 1 An example of 18th-19th Century Rectilinear Fields at Applecross (NG 7160 4550).



## 2. Moorland and Rough Grazing

Moorland and Rough Grazing covers the largest proportion of the study area and dominates the more exposed mountainous regions. On low-lying ground, Moorland and Rough Pasture occupy the landscape between areas of more fertile farmland and settlement. It is important to remember that these areas have probably been managed in this way for hundreds, if not thousands, of years, and the absence of any visible structures should not imply a lack of past land-use.

Regions of Moorland and Rough Grazing may contain extensive areas of relict landscape, which, for obvious reasons, are commonly to be found immediately outwith the areas of modern agricultural land (see Fields and Farming). Consequently, they are often vulnerable to damage as a result of agricultural improvements; equally, these relict landscapes are under threat from afforestation, which is frequently sited in the most favourable areas of rough grazing.

Relict archaeological landscapes often give a good indication of the outer limits of prehistoric and more recent phases of agriculture and settlement. The pattern of shielings, despite its patchy record, shows that, prior to the 19th century, much of the ground up to 300m was suitable for summer exploitation, and sheep and cattle are likely to have been grazed well above that height. Permanent pre-improvement settlements tend to hug the coast, and, while many have been transmogrified into crofting settlements, others lie abandoned in the rough grazing land.

There are extensive signs of peat cutting, now disused, in the rough grazing around the townships and in more distant locations. Many of these could not be fully mapped from aerial photography since the old cuttings have grown over and are indistinguishable from the surrounding pasture, e.g. in the hanging valley of Coire Beag na Ba (NG 7845 4125). This is also a reminder that there are few parts of the rough grazing areas that have not been altered by human activities, such as grazing, peat-extraction or woodland exploitation.

Prehistoric settlement remains dating to the Bronze and Iron Ages are even more patchily represented in the archaeological record than pre-improvement settlements. There is, however, a concentration of hut-circles around Gairloch, where more systematic fieldwork has been undertaken out than elsewhere, which suggests that many new sites await discovery. Indeed, fieldwork carried out during field checking for the HLA project located new hut-circles and field-systems at Kinlochewe. The distribution of these sites, which so far all lie below the 150m contour, suggest that the prehistoric settlement pattern was more dispersed than that of post-medieval settlement.

Early prehistory is represented by mesolithic (7500-3500BC) use of rock shelters, which are found in coastal locations throughout the area. The recently excavated example at Sand, Applecross (NG64NE 8) lies on the coastal fringe, but it is also possible that inland sites may remain to be discovered.

Numerous abandoned townships still have been identified along the coasts and glens throughout Wester Ross. Particularly good examples of depopulated townships and their associated field-systems survive along the northern shore of Loch Torridon at Inveralligin (NG85NE 17) and at Strome Meanach (NG83NE 8) beside Loch Carron. The latter was abandoned in the late-19th century and comprises 28 buildings, including houses, barns and byres and a well-preserved corn-drying kiln.

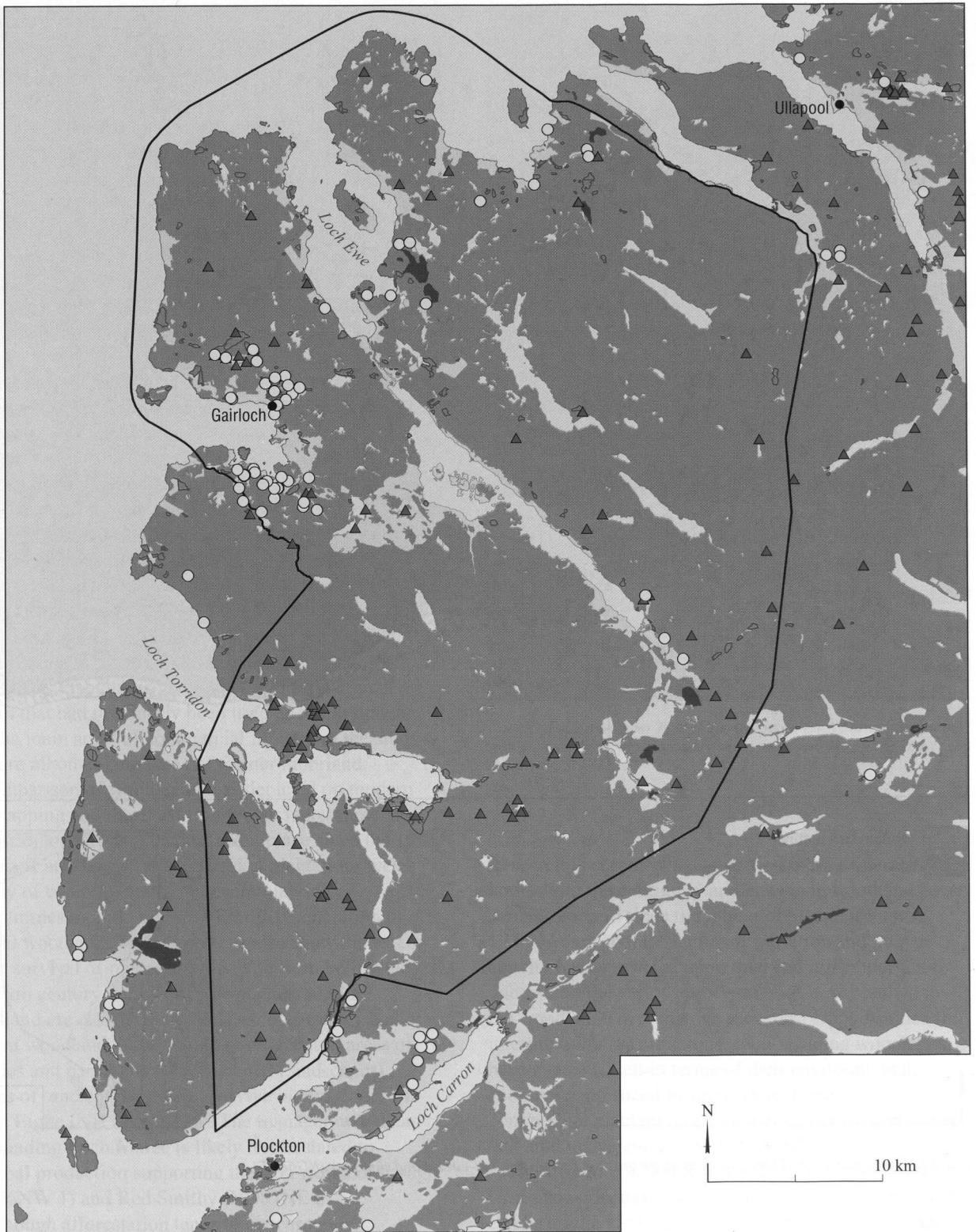
The hinterlands of these settlements still hold their traditional grazing potential, and the remains of shieling grounds associated with the permanent settlements can still be identified, often preferentially grazed by sheep and deer. They can be found near the coast or in the glens nearby the old settlement centres. At each shieling ground, small huts were built to shelter the people working in the summer pastures. Examples are recorded found near Shildaig, and in the Applecross and Gairloch areas. In comparison with other Highland areas, relatively few shieling sites have been identified in Wester Ross, but this may be accounted for by the lack of extensive fieldwork in the appropriate areas.









As might be expected, the remains of relict industrial land-use are not well represented, but evidence for iron working at Fasagh (NH06NW 1) has been preserved in an area of rough grazing on Loch Maree and remains of a similar type have been recorded at Red Smithy.

### *Management*

Appropriate grazing regimes will ensure the maintenance of this type of land-use and the familiar landscape of the area. Attention should be paid to the relict areas that have been identified, since these will be under threat from changes in land-use. Their recognition through HLA suggests that they are of significant extent, and no doubt they reflect a wider distribution not picked up by HLA. Continued grazing will ensure stability, provided that levels are not too intense, and that feeding stations are kept well away from the concentrations of structures.

Should grazing cease, or be radically reduced, particularly in those areas which have not been drained or otherwise improved, natural regeneration would pose a serious threat to the historical and archaeological evidence. The emergence of scrub would represent a dramatic change from the use to which the land has been put for centuries. The relict areas in particular hold valuable evidence for understanding the past, and extensive areas of moorland have already been replaced by forestry in the 20th century. It is consequently important that any decision for further extensive planting or natural regeneration takes the cultural heritage into account through the consultation of the HLA and the local Sites and Monuments Record.



- |   |                       |   |            |   |                      |
|---|-----------------------|---|------------|---|----------------------|
|  | Drained Rough Grazing |  | Hut-Circle |  | Water                |
|  | Rough Grazing         |  | Shielling  |  | Other Land           |
|  | Relict Area           |   |            |  | National Scenic Area |

Map 6 Historic Land-use Assessment: Moorland and Rough Grazing.



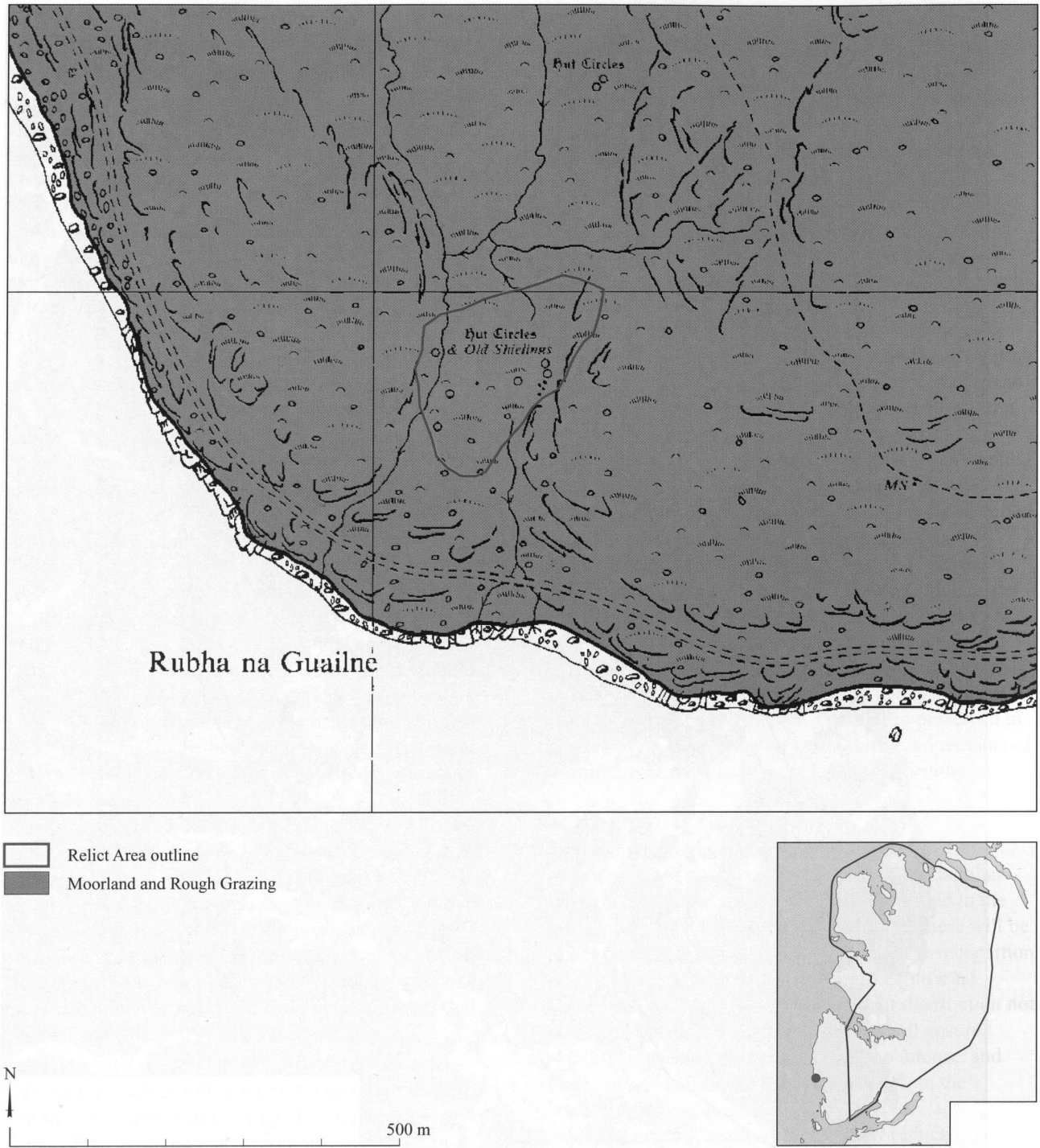


Fig. 2 Relict archaeological landscapes in rough grazing, comprising hut-circles and shielings (NG64NE).

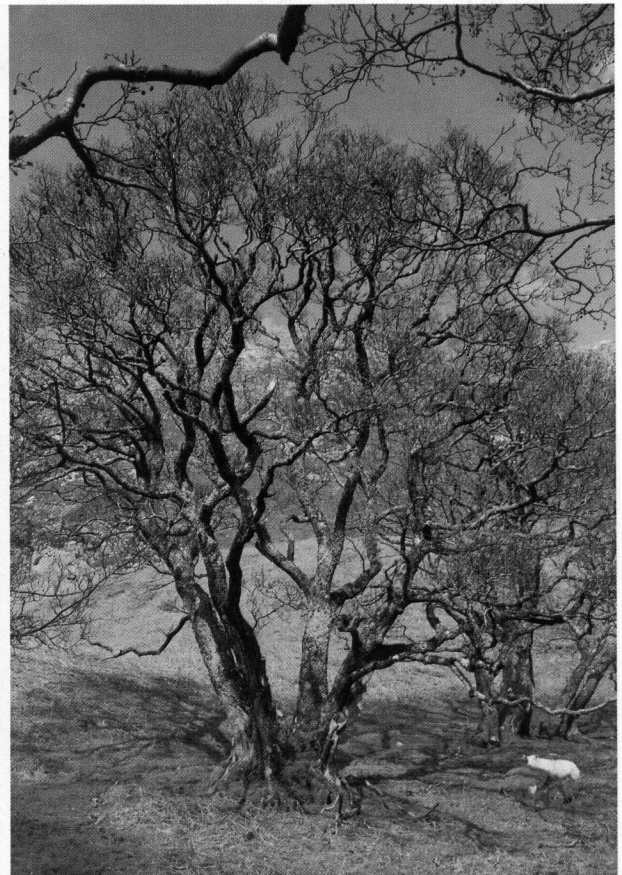
### 3. Woodland and Forestry

Woodland has been managed since prehistoric times as a resource to provide firewood, charcoal, building materials, and grazing. Some woods will have been coppiced to ensure that there was a supply of suitably-sized poles, while others will have been allowed to grow naturally. Where woods were harvested and regeneration was intended, dykes, fences or earthworks may have been constructed to control grazing animals, but few traces of this have been found in Wester Ross. The former extent of woodland in Wester Ross is not known, but continuing research on palaeo-environmental remains is confirming the complexity of the history of vegetation change in the area. Woodland for ornamental purposes is included in Designed Landscapes (see below).

The recognition of a strategic requirement for timber in times of national emergency led to the creation of the Forestry Commission in 1919, with the intention of planting enough woodland to provide the timber needed in the event of another major war. This resulted in the planting of extensive conifer woodland on areas of rough grazing, since the government would not allow agricultural land to be planted. Conifers were shown to be best suited to the conditions in these areas; thus, Coniferous Plantations generally occur on marginal terrain that had previously been used as rough grazing, and the main areas of commercial forestry in the study area are all on upland areas of former moorland.

Comparison of woodland areas depicted on modern OS mapping and the 1<sup>st</sup> edition 6-inch maps show the expansion of forestry that has taken place since the 19<sup>th</sup> century. Early Forestry Commission plantations were mainly of conifers, but more recent planting programmes include schemes for the regeneration of natural woodland. The same maps also show the extent of the survival of managed woodland from before the late 19th century. Many of these pockets of older woodland are classified by SNH as long-established or ancient woodland, often within or adjacent to areas of policies and parklands (see Designed Landscapes). Traces of 'ancient' woodland survive on the slopes of Beinn Eighe (NH 0050 6086). The managed woodland surrounding Loch Maree is likely to be related to charcoal production supporting the iron works of Fasagh (NH06NW 1) and Red Smithy (NG87NE 2).

Although afforestation tends to obscure much evidence of past land-use, a number of relict areas have been recorded within the Woodland and Forestry category. The field boundaries of some 18th-19th Century Rectilinear Fields are still recorded on recent 1:10,000 map as at Reraig Cottage (NG8390 3640), while traces of pre-improvement settlements and field-systems within plantations have been recorded at Torgarve (NG74SW 19) and Drumchork (NG88NE 19). The survival of relict archaeological landscapes within some forestry plantations is not good, due to the destructive methods of planting, in particular, deep ploughing to increase soil depth and improve drainage.



*Coppiced oak trees near Fasagh ironworks on Loch Maree. Coppicing would ensure a supply of suitably-sized poles for charcoal for the ironworks. SC 771317*









#### *Management*

Research is currently being carried out by a number of bodies into the continuity and change in woodland cover across Scotland since the retreat of glacial ice some 10,000 years ago. Both climate variation and human activity have impacted upon this, and it is important to understand the various processes that have resulted in the woodland cover that we see today. Opportunities for interpretation are numerous; long-standing woodlands have a story to tell in terms of their environmental, economic and social history, while the recent commercial plantations conceal evidence for earlier use and land management within their boundaries.

The structure of woodland and forest across the NSA varies considerably, but there are certain principles that can be applied in terms of management. Where either new or replacement planting is considered, it is important to refer to the HLA data, along with other information sources. This will give an understanding of the historical context of the area's land-use and help clarify the most appropriate and least damaging locations. Some areas are more appropriate for afforestation than others, as a result of the limitations of the natural environment and of historic character. Much of Wester Ross is too barren and exposed for extensive tree planting. The category Late 20th Century Woodland Plantations show the extent of recently-approved grant schemes: these will have a dramatic





- |   |   |   |                                      |   |            |
|---|---|---|--------------------------------------|---|------------|
|  | Late 20th Century Coniferous Plantation |    | Relict Post-Medieval Plantation      |  | Water      |
|  | 20th Century Coniferous Plantation      |    | Relict Area in Woodland and Forestry |  | Other Land |
|  | 18th-20th Century Managed Woodland      |  | National Scenic Area                 |   |            |

Map 7 Historic Land-use Assessment: Woodland and Forestry.



impact on the appearance of the landscape and the survival of archaeological remains.

Forestry Commission guidelines for design, planning and archaeology are all relevant in ensuring that the historic environment is adequately considered within forestry and woodland schemes. The same management principles must be applied to schemes for planting and for natural regeneration, as the impact on the historic elements will be the same. Active management may be required, particularly in areas of regeneration, to prevent important features being gradually overwhelmed. It may be appropriate to consider leaving larger areas free from planting following harvest where the evidence for earlier

activity can be clearly defined. The local SMR will provide more detailed information on individual sites, and there may be a need for further survey to inform woodland management decisions, given the general lack of modern investigation in the area.

It is important to remember that people have exploited woodland for millennia, and that there are substantial benefits in considering both the environmental and human history of an area when proposing the expansion or creation of areas of natural regeneration, or native woodland. Management of the historic landscape and the objectives of biodiversity can offer mutual benefits if all aspects are considered at the earliest stage.

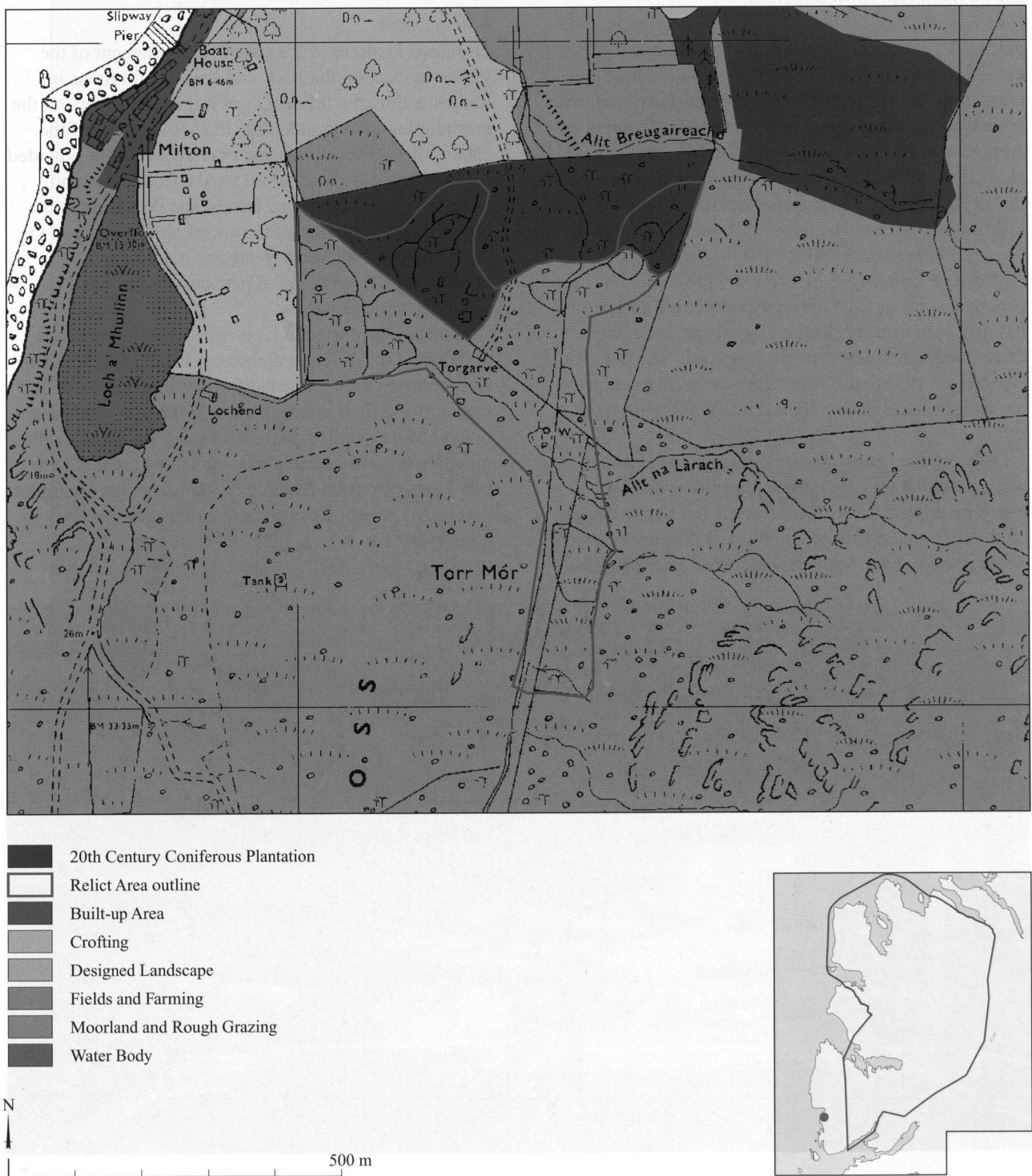


Fig. 3 An example of a relict archaeological landscape in forestry at Torgarve (NG74SW 19), comprising traces of pre-improvement settlements and field-systems.

#### 4. Designed Landscapes

Designed landscapes include the policies and parklands laid out around the greater and lesser houses of the Scottish countryside from the Renaissance to the 19th century. In the late 17th century the imposition of man on nature was seen as the essence of design, while from the later 18th century, a more romantic or 'naturalistic' approach was adopted. Both styles, however, involved planting trees, often exotics, as part of the overall design. The creation of designed landscapes did not cease with the passing of the 19th century and at least one 20th century example - Couldoran, NG84SW 18 – can be identified in Wester Ross.

In Wester Ross, the majority of designed landscapes date to the 19th century and probably relate to the growth in popularity of the sporting estate. These landscapes are scattered throughout the study area, with several examples around Loch Torridon, and others at Applecross, Gairloch and Loch Ewe. Most are situated along the coast or beside large inland lochs, suggesting that scenic qualities were important in their choice of location. Two examples, however, have more ancient origins, Flowerdale, Gairloch (NG87NW 34), and Applecross House (NG74NW 13). Flowerdale has been occupied since at least the medieval period, and part of its early 18th century planned landscape, including a drive lined with trees, can still be traced. The policies at Applecross House also date to the early 18th century, but later changes have removed much of the original layout.

Defining the boundaries of a designed landscape, while essential for management purposes, can be problematic, and the influence of the landscape design on the surrounding landscape must also be considered. Some policies have been turned over to arable (i.e. New

Fields) in more recent times, as at Letterewe (NG 9579 7065) and Inveran (NG 8749 7863). In both areas the basic layout of the policies has been retained. On occasion, policies and parkland have become public recreation areas, as at Torridon Hotel (NG85SE 17), or Inverewe House (NG88SE 35). At the former, the original policies have undergone some change with the loss of the full extent of the design. However, much of the original design, including the associated woodland, is still maintained despite the changes in the management and land-use.

#### *Management*

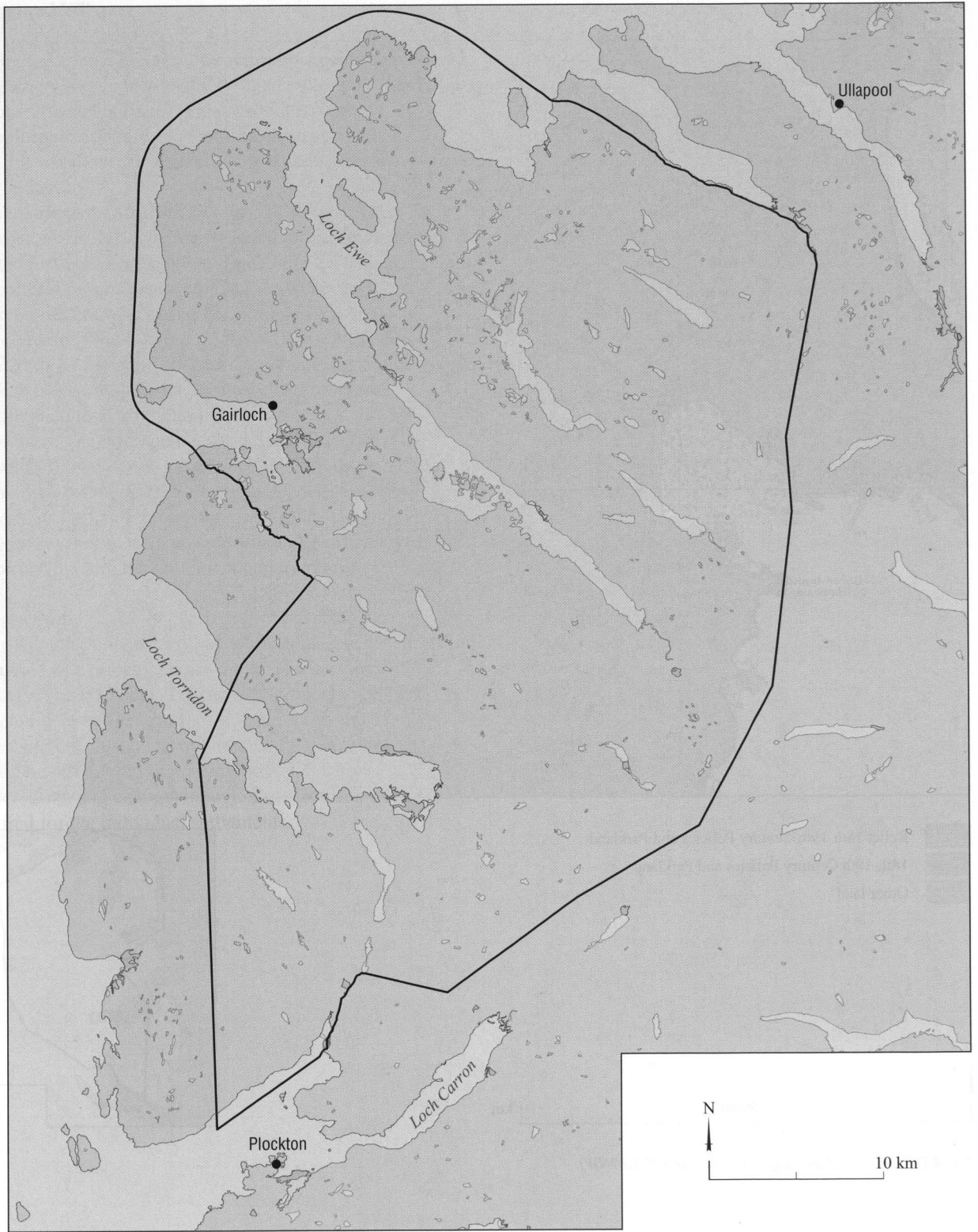
Designed landscapes are a significant element of the human impact on the NSA and are a useful focus in understanding the influences of large landowners on the surrounding countryside. It is likely that many of the estates did not serve as primary residences, but provided for their owners' recreational needs. Both relict and historic types of Designed Landscape demonstrate the physical manifestation of the social philosophies of the time, and even where an estate has been long abandoned, the networks of paths and vistas are a reminder of these values.







In managing designed landscapes, it is important to understand the different elements of the landscape. Did an arboretum exist and what form did it take? Did the layout of the field system centre on the axis of the main house? More detailed analysis of the HLA, along with other sources, would help to establish where there are particularly unusual features or fine surviving examples that might benefit from proactive management and conservation.



*Aerial view showing the policies and parklands of Applecross with 18th-19th rectilinear fields in the background. Note the curve of the former fish-trap in the inter-tidal zone on the right hand side of the bay. SC 769684*

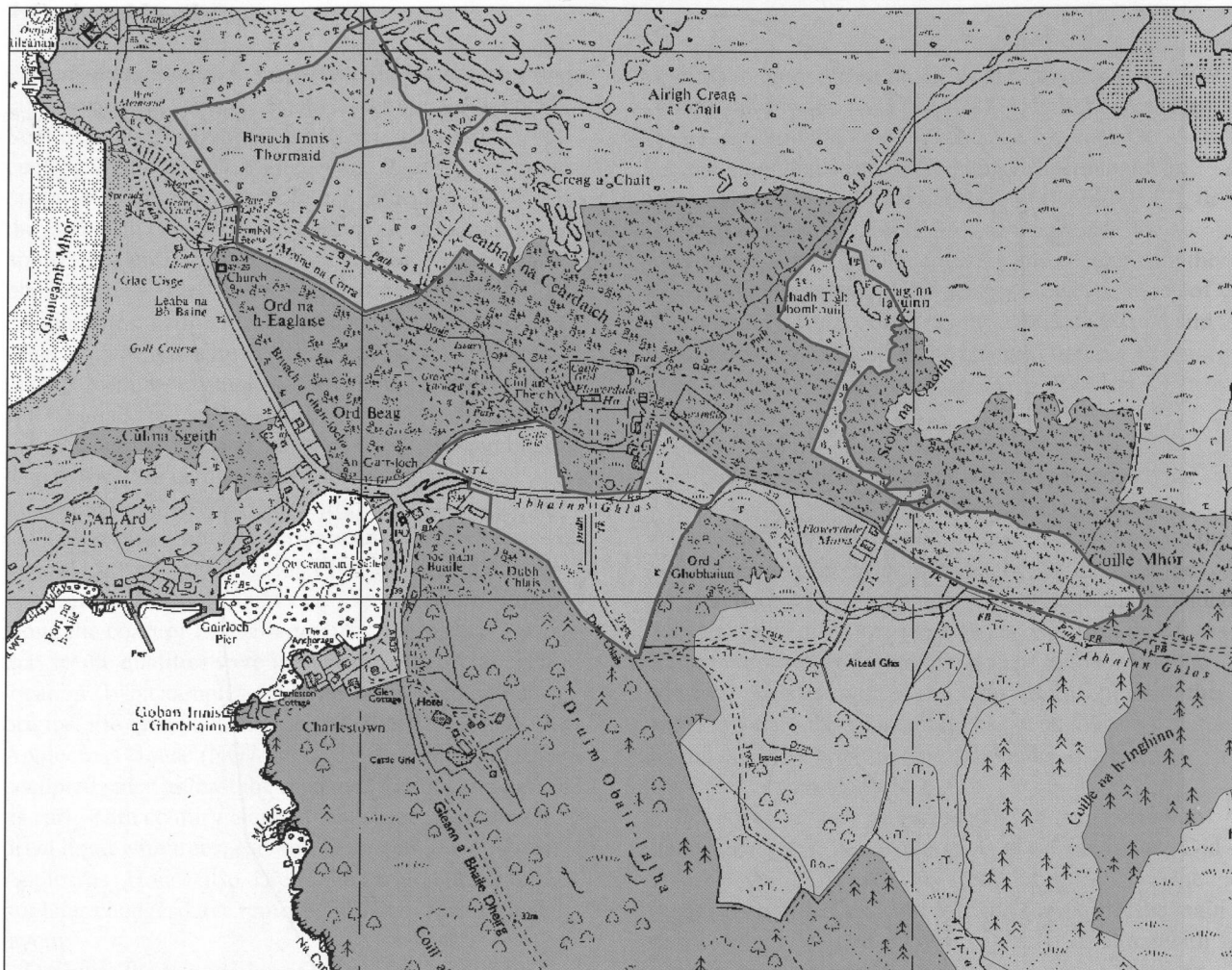




- |   |   |   |                      |
|---|---|---|----------------------|
|  | 17th-19th Century Policies and Parkland |  | Water                |
|  | Relict 17th-19th Century Policies       |  | Other Land           |
|  | Relict Areas in Policies                |  | National Scenic Area |

Map 8 Historic Land-use Assessment: Designed Landscape.





- Relict 18th-19th Century Policies and Parkland
- 18th-19th Century Policies and Parkland
- Other land

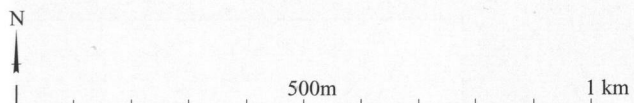
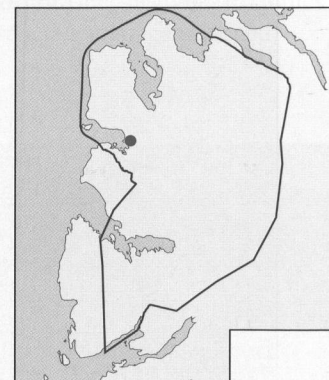


Fig. 4 The Designed Landscape of Flowerdale (NG87NW).

## 5. Planned Villages






During the course of agricultural improvements some landowners sought to provide for the landless by establishing new villages. This was not an entirely philanthropic exercise, since it was also to provide a resource of labour for agriculture, fishing and other rural industries.

There are two 18th-19th Century Planned Villages recorded by the HLA in Wester Ross, though both are located just outwith the NSA. Some villages had an agricultural purpose and were laid out to house farm workers, but both the examples in the HLA area had a marine focus. Plockton (NG83SW 3) was established by the Earl of Seaforth in 1794, and a plan of the village in 1801 shows a proposal for another street of houses running behind Harbour and Bank Street, which was never built. The other planned village is Ullapool (NH 1280 9430), which was established in 1788 by the British Fisheries Society as a fishing settlement to exploit herring, already an important industry in the area. Both villages have now developed as urban areas and act as the foci for settlement and tourism.

### *Management*

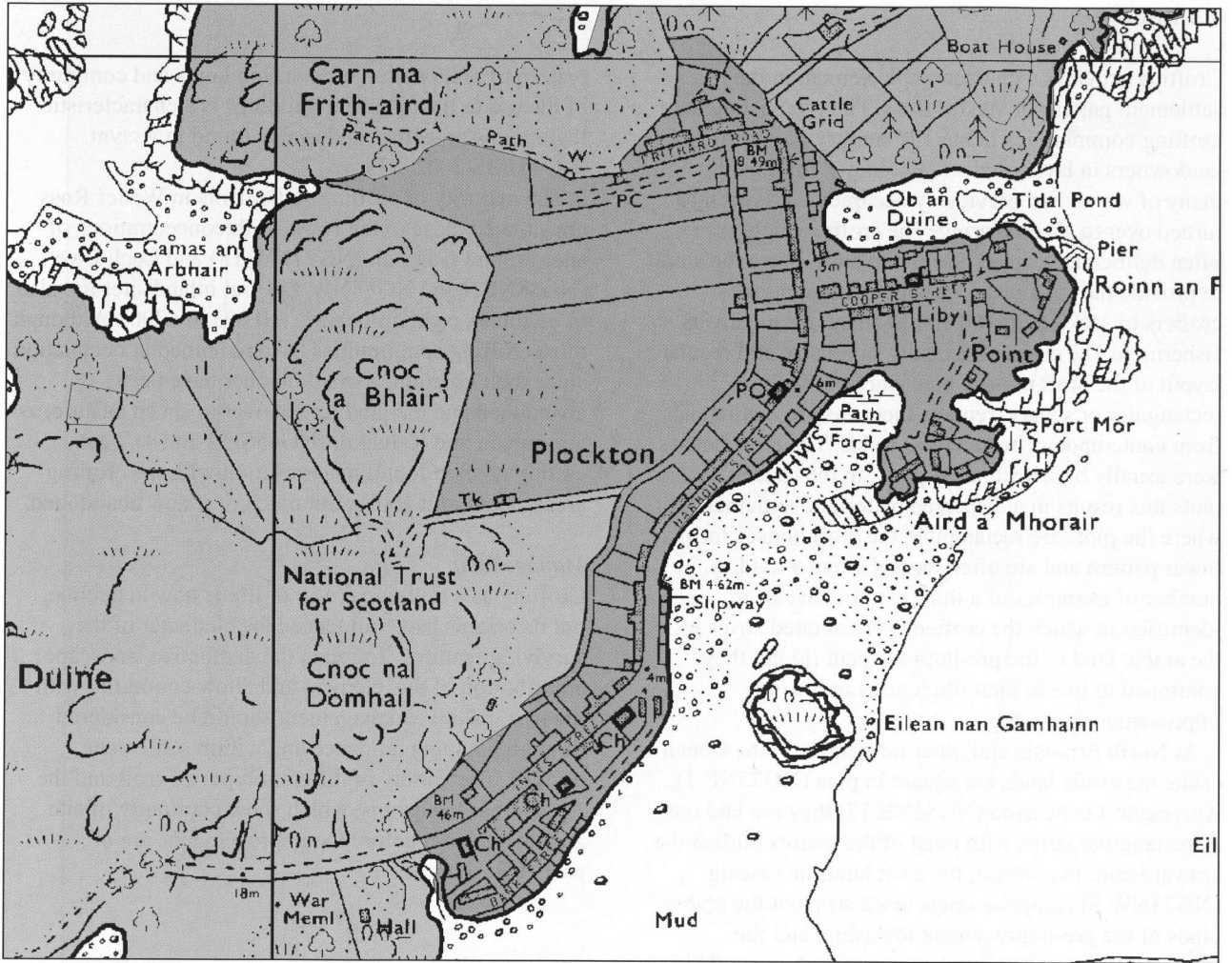
The distinctive character of settlements has been identified as a priority within the NSA Management Strategy. The HLA data contributes to understanding this character by identifying the different forms of origin and layout. The layout and nature of each place should be considered in developing policies for conservation and change, though more detailed work is required for the individual settlements.



- |   |   |   |                      |
|---|---|---|----------------------|
|  | 18th-19th Century Planned Village: Agricultural |  | Other Land           |
|  | 18th-19th Century Planned Village: Industrial   |  | National Scenic Area |
|  | Water   |   |                      |

Map 9 Historic Land-use Assessment: Planned Villages.





18th-19th Century Planned Village: Agricultural  
 Other land



500 m

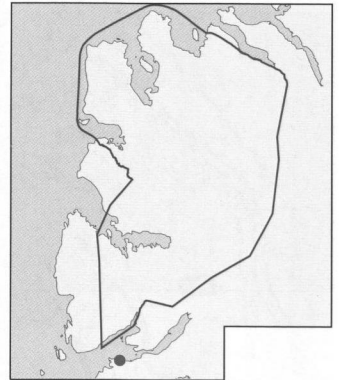


Fig. 5 The Planned Agricultural Village of Plockton (NG83SW 3), which lies just outside the NSA.

## 6. Crofting

Crofting provides a characteristic element in the settlement pattern of Wester Ross. The establishment of crofting communities in the 19<sup>th</sup> century involved landowners in laying out smallholdings for tenants, many of whom had previously occupied land recently turned over to sheep rearing. The crofts, which were often deliberately sited close to the coast, were too small to provide the sole means of support, forcing most crofters to seek additional employment, frequently as fishermen. The characteristically small size and regular layout of the croft plots, which were normally rectangular or square, renders them easy to distinguish from contemporary rectangular fields. The croft houses were usually built within the plots; in the case of square plots this results in a dispersed pattern of settlement but, where the plots are rectangular, the croft houses form a linear pattern and are often ranged along a road. A number of examples of a third pattern have been identified in which the crofters were allotted strips in the arable land of the pre-improvement rig but they continued to live in their old houses in the pre-improvement township.

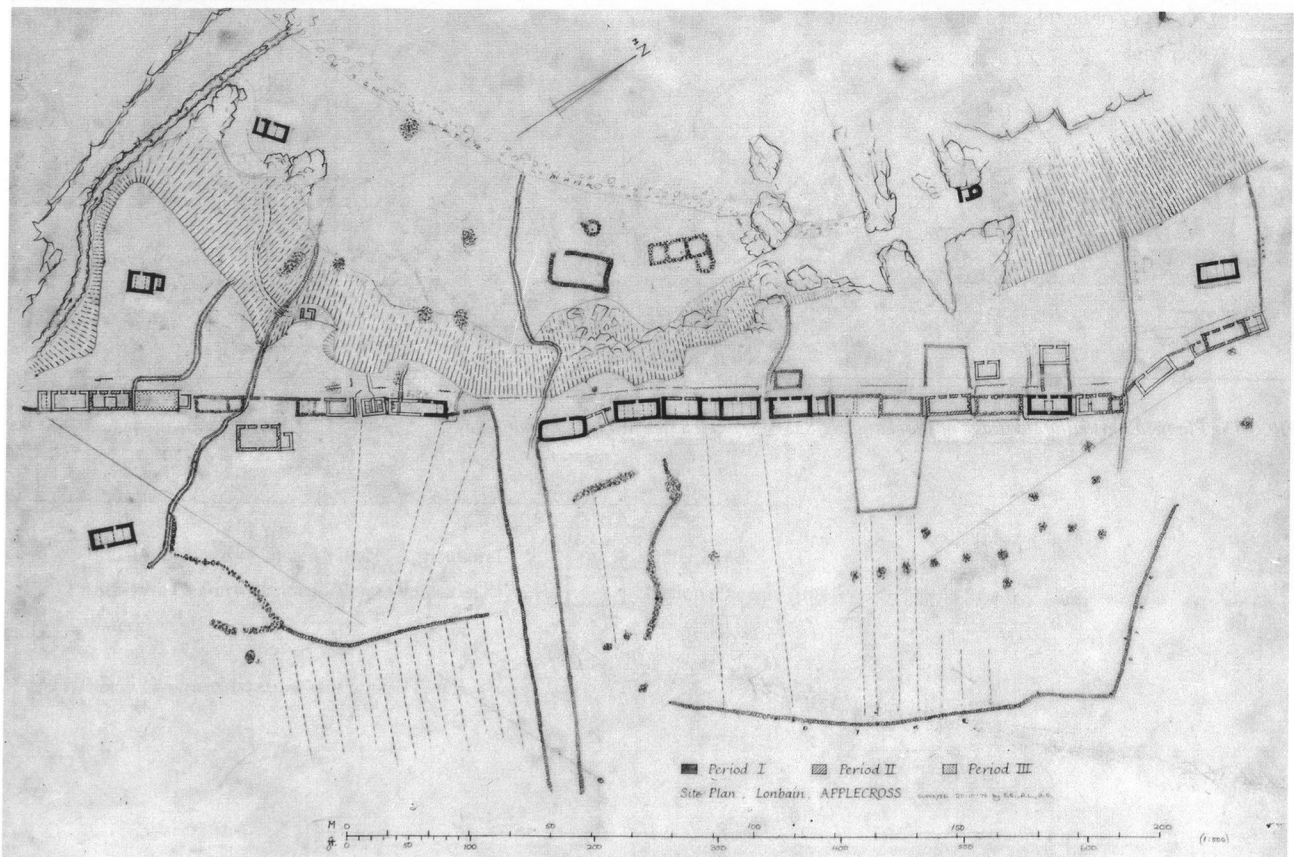
At North Erradale and other townships on the Conan estate the crofts lands are square in plan (NG77NE 3), whereas at Lochcarron (NG83NE 17) they are laid out as rectangular strips with most of the houses built at the seaward end. In contrast, the croft lands at Toscaig (NG73NW 3) comprise unenclosed strips of the arable lands of the pre-improvement township, and the township houses appear to have remained in use. This

pattern of reallocation of township lands and continuity of the use to the township buildings is a characteristic feature in Applecross and is also found in Assynt (RCAHMS 2002, 21).

The majority of crofting settlements in Wester Ross are situated close to the coast, with concentrations of sites around Gairloch (NG77NW 13) and Loch Ewe (NG88NE 9 and NG88NW 15), but inland sites are also to be found, e.g. Kinlochewe (NH 0350 6200). Although most crofting communities have remained in occupation since their creation, a small number have been abandoned and the land turned over to sheep pasture, as at Lonbain and Kalnakill (NG65SE 2 and 4). Peat cutting is often found in association with the crofting areas, some of it active, but much of it now abandoned.

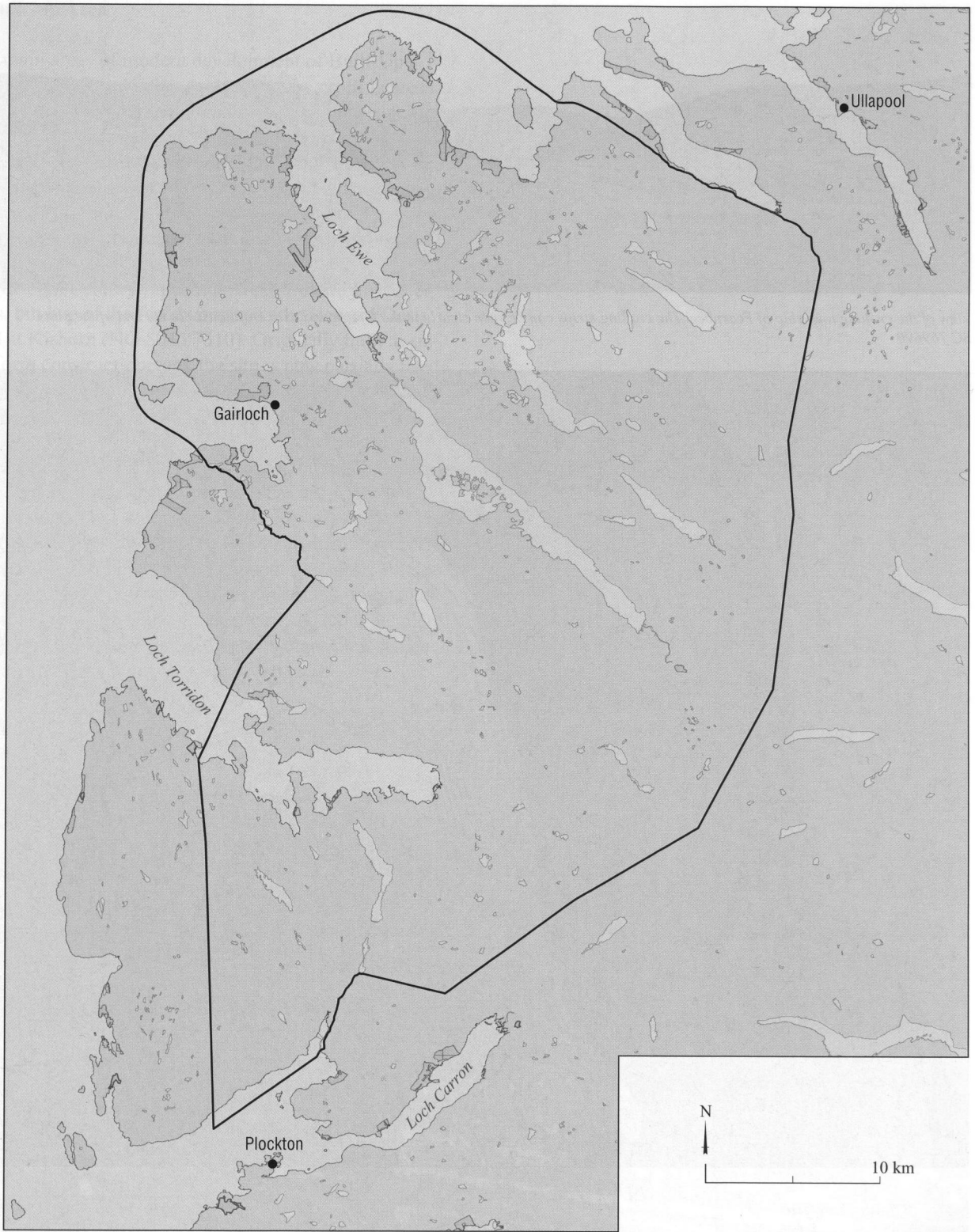
### Management







Crofting as a traditional way of life is now in decline, but its origins have influenced the character of the surviving features. To retain the distinctive landscape contribution of this element and allow continuity with the past, positive management should be considered through planning guidance and within settlement designs. The variety of different types of croft and the Applecross townships, which show continuity of site and layout from before the improvements, are of particular interest.



Plan showing the linear crofting settlement of Lonbain. Note the pattern of allotted croft land with the houses built within the plots. SC 769688

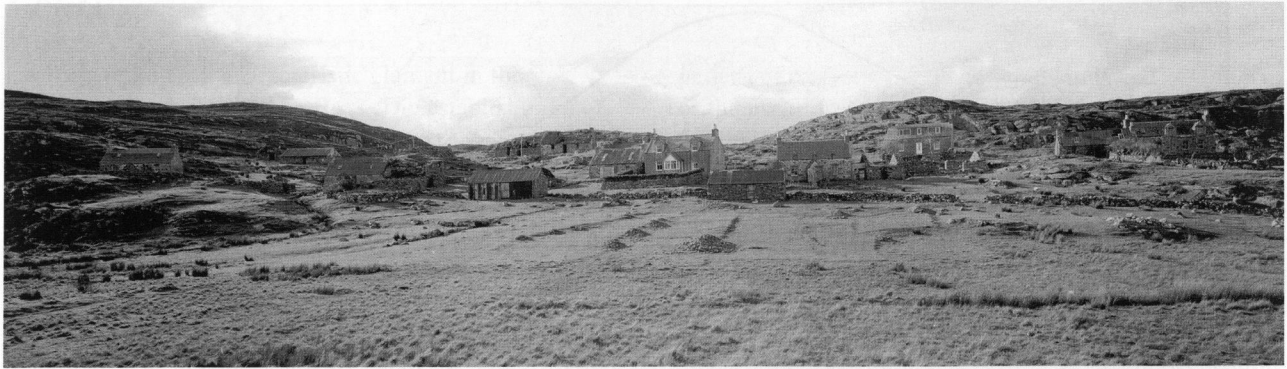




- |   |                          |   |                      |
|---|--------------------------|---|----------------------|
|  | Crofting Township        |  | Water                |
|  | Relict Crofting Township |  | Other Land           |
|  | Relict Areas in Crofting |  | National Scenic Area |

Map 10 Historic Land-use Assessment: Crofting.





View of the crofting township of Fearnbeg. The crofting strips can be seen clearly in the foreground with croftshouses at the end of the plots.  
SC 769690



- Crofting
- Moorland and Rough Grazing
- Woodland and Forestry

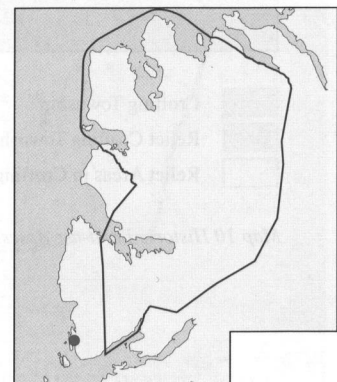


Fig. 6 An area of crofting and pre-improvement settlement at Toscaig (NG73NW).

## 7. Built-up Area

The main areas of modern development of Built-Up Areas can be found either on, or near, the crofting areas. This type of development is most obvious at Gairloch (NG 8045 7510), where new bungalows are being developed on the former crofting land, and a process of in-filling is taking place. A number of the other Built-up Areas are a product of 19<sup>th</sup> century expansion of existing linear crofting settlements, as at Lochcarron and Poolewe.

19<sup>th</sup>-20<sup>th</sup> Century Industrial Areas are rare in Wester Ross, but one of the few examples is the Howard Doris Yard at Kishorn (NG 8045 7510). Originally built as oil-platform construction yard, the site is now partially used for industrial purposes, while the remainder lies derelict.

### *Management*







The main aims should be to recognise and retain the key historic characteristics of built up areas as modern development takes place, and to identify any particularly sensitive areas of archaeological or historic interest for appropriate protection or management measures. While the HLA gives an indication of the historical origin and essential character of modern settlements, more detailed analysis is likely to be needed in such areas than can be achieved within the broad scale of the HLA.



*View of Ullapool from the south-east. Originally established as a Planned Village, Ullapool has expanded in recent years and is now one of the bigger built-up areas in Wester Ross. SC 401755*





- |   |  |   |                      |
|---|--|---|----------------------|
|  | 18th-20th Century Urban Area                     |  | Water                |
|  | 19th-20th Century Industrial and Commercial Area |  | Other Land           |
|  | Relict Areas in Built-up Areas                   |  | National Scenic Area |

Map 11 Historic Land-use Assessment: Built-up Area.





- Built-up Area
- Crofting
- Fields and Farming
- Moorland and Rough Grazing
- Recreation Area

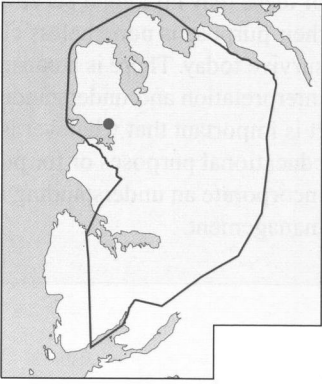


Fig. 7 A map showing the development of modern bungalows on former crofting land at Strath, Gairloch (NG 8045 7510).

## 8. Recreation Area

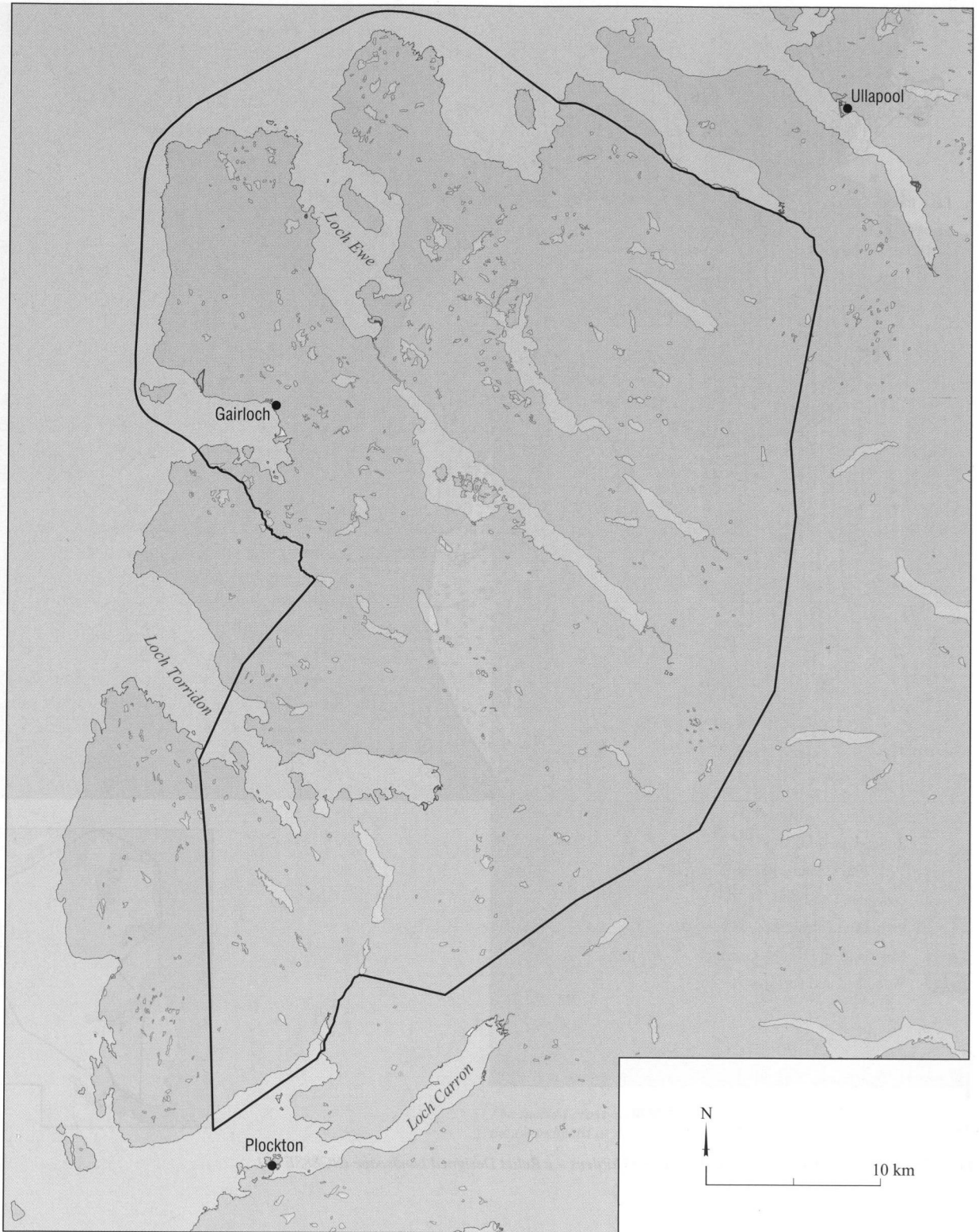
Recreational landscapes are a recent development. Until the 19th century, leisure was exclusive to the upper and middle classes who constructed policies and parklands for their own enjoyment. Shooting, fishing, stalking and walking have been common activities since the Victorian times, and today many buildings in Wester Ross have been given over to the provision of tourist accommodation. Indeed some were built with the intention of holiday letting or guest accommodation. Easy access to the mountain scenery in Wester Ross has made the area attractive to cyclists, hill walkers, climbers, bird-watchers and naturalists, and in one sense the whole area is now used for recreation.







Other recreation areas were formerly 18th-19th Century Policies and Parklands maintain much of their original design. Inverewe House and Gardens (NG88SE 35) retains all the elements of a designed landscape and is now open to the public as a botanical garden. It is owned by the National Trust for Scotland, but was first established in the 1860s by Osgood Mackenzie.

In many cases caravan parks and golf courses have been built on former farmland. The golf course at Loch Carron (NG 9150 4140) has been built on top of a pre-improvement settlement. This is also the case at Little Sand (NG 7573 7848), where the camping site and playing fields overlie a sheep-farm.

### *Management*

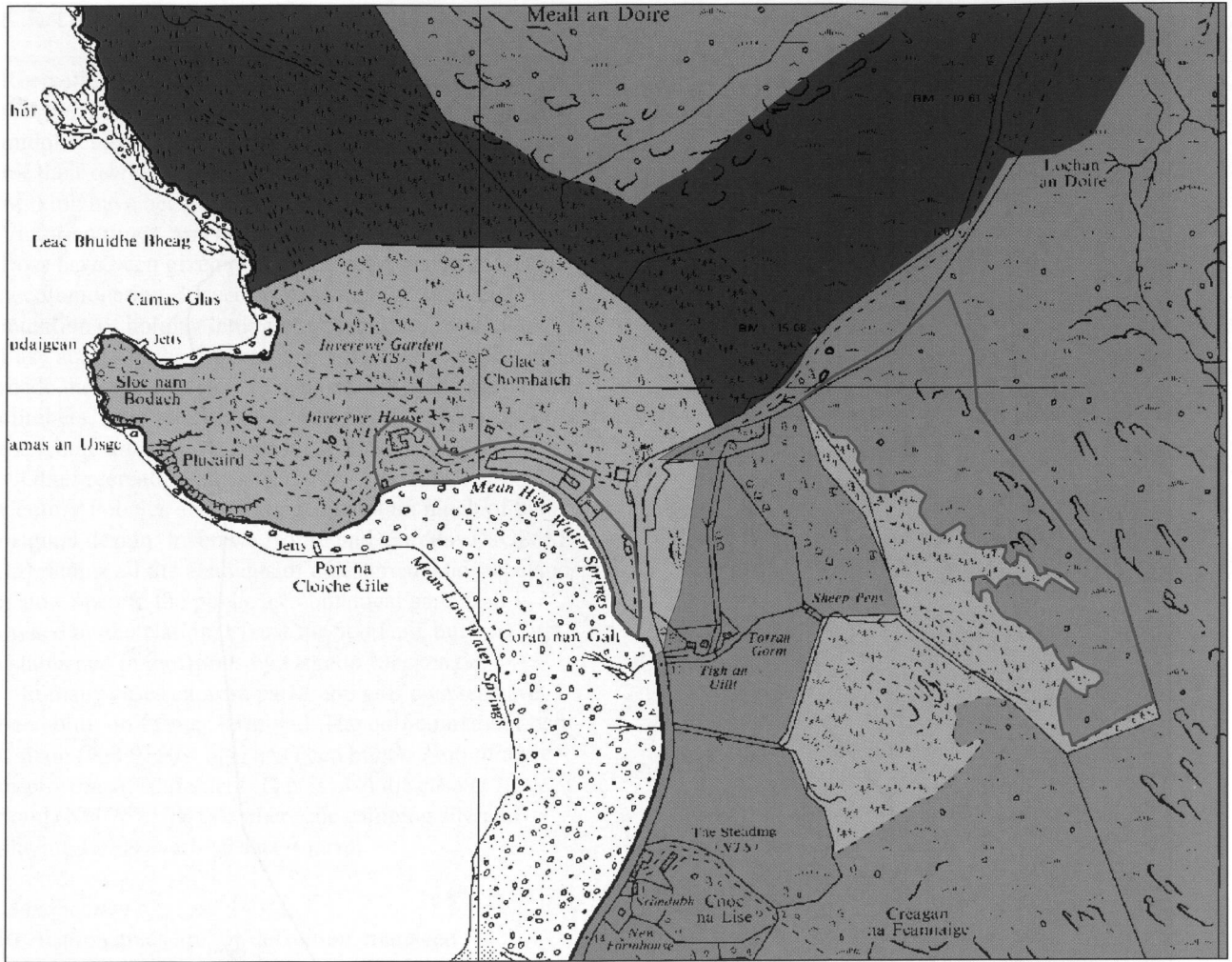
Recreation areas are, by definition, managed deliberately for the enjoyment of the public. While many of these may no longer serve their original function, their purpose is nonetheless clear in the features that survive today. There is a considerable opportunity for interpretation and understanding of historical processes. It is important that whatever is planned, whether for educational purposes or for pure entertainment, should incorporate an understanding of past purpose and management.









- |   |                                   |   |                      |
|---|-----------------------------------|---|----------------------|
|  | 19th-20th Century Recreation Area |  | Water                |
|  | 19th-20th Century Golf Course     |  | Other Area           |
|  | Relict Area in Recreation         |  | National Scenic Area |

Map 12 Historic Land-use Assessment: Recreation Area.





-  Relict Area outline
-  19th-20th Century Recreation Area
-  Designed Landscape
-  Fields and Farming
-  Moorland and Rough Grazing
-  Woodland and Forestry

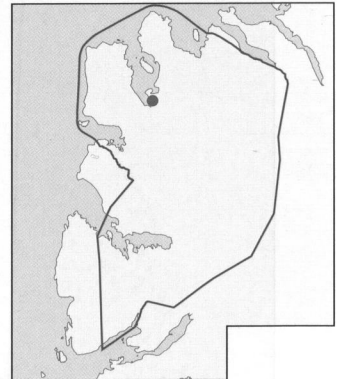
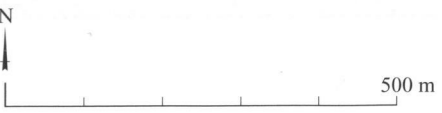


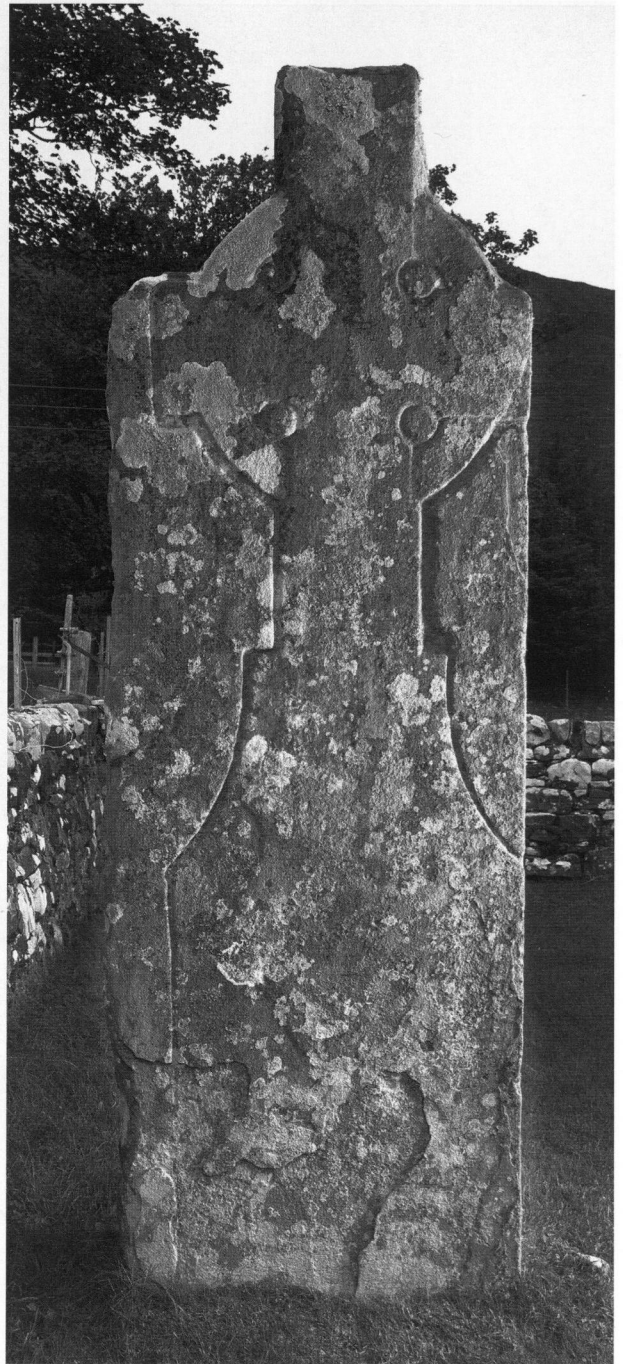
Fig. 8 The Recreation Area of Inverewe House and Gardens – a Relict Designed Landscape (NG88SE 35).

## 9. Ritual Areas

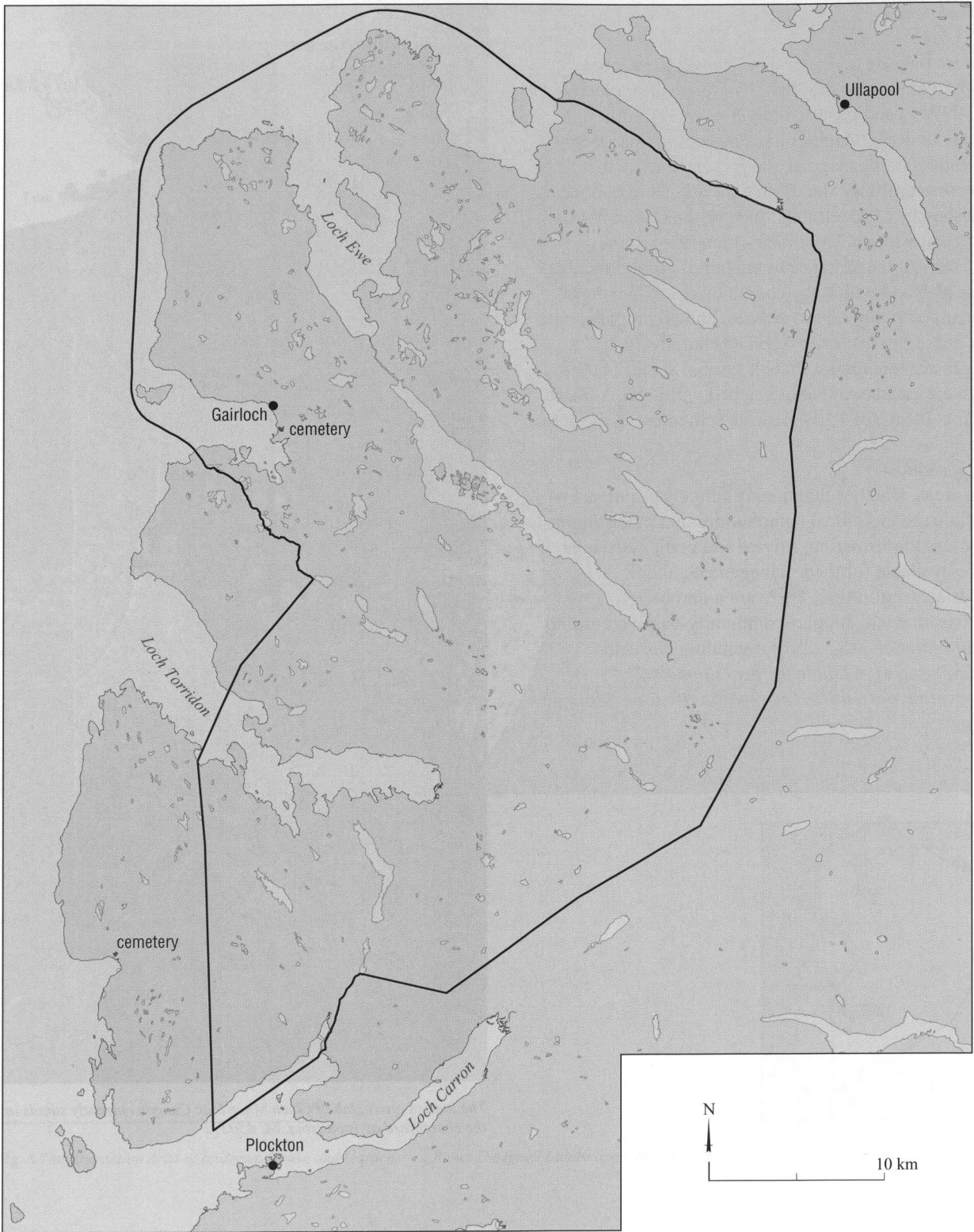
There are only two cemeteries in Wester Ross large enough to register in the HLA. These are at Applecross (NG74NW 7) and Gairloch (NG87NW 37). Although there are no Relict Archaeological types in this category large enough to be mapped, the present church at Applecross probably stands on the Early Christian site established by St Maelrubha. Indeed, the Gaelic name for Applecross - *A Chromraich* - translates as 'the sanctuary'. At the entrance to the burial ground there is a cross-slab and within the church there are two more fragments of richly carved crosses, and all probably date to the 8th or 9th centuries AD. The churchyard at Gairloch also contains a Pictish symbol stone. Thus, though not capable of being mapped within HLA, there is clear evidence of Early Historic settlement in the area.





### *Management*

Ritual areas, whether functioning actively or not, are of great value to their local communities and a rich source of historical information. Advice and grant assistance may be available for their management, and if appropriate, restoration. There are a number of initiatives that will support community-based recording and conservation programme, including Historic Scotland's report, a *Guide for Practitioners 2: Conservation of Historic Graveyards* (Historic Scotland 2001).



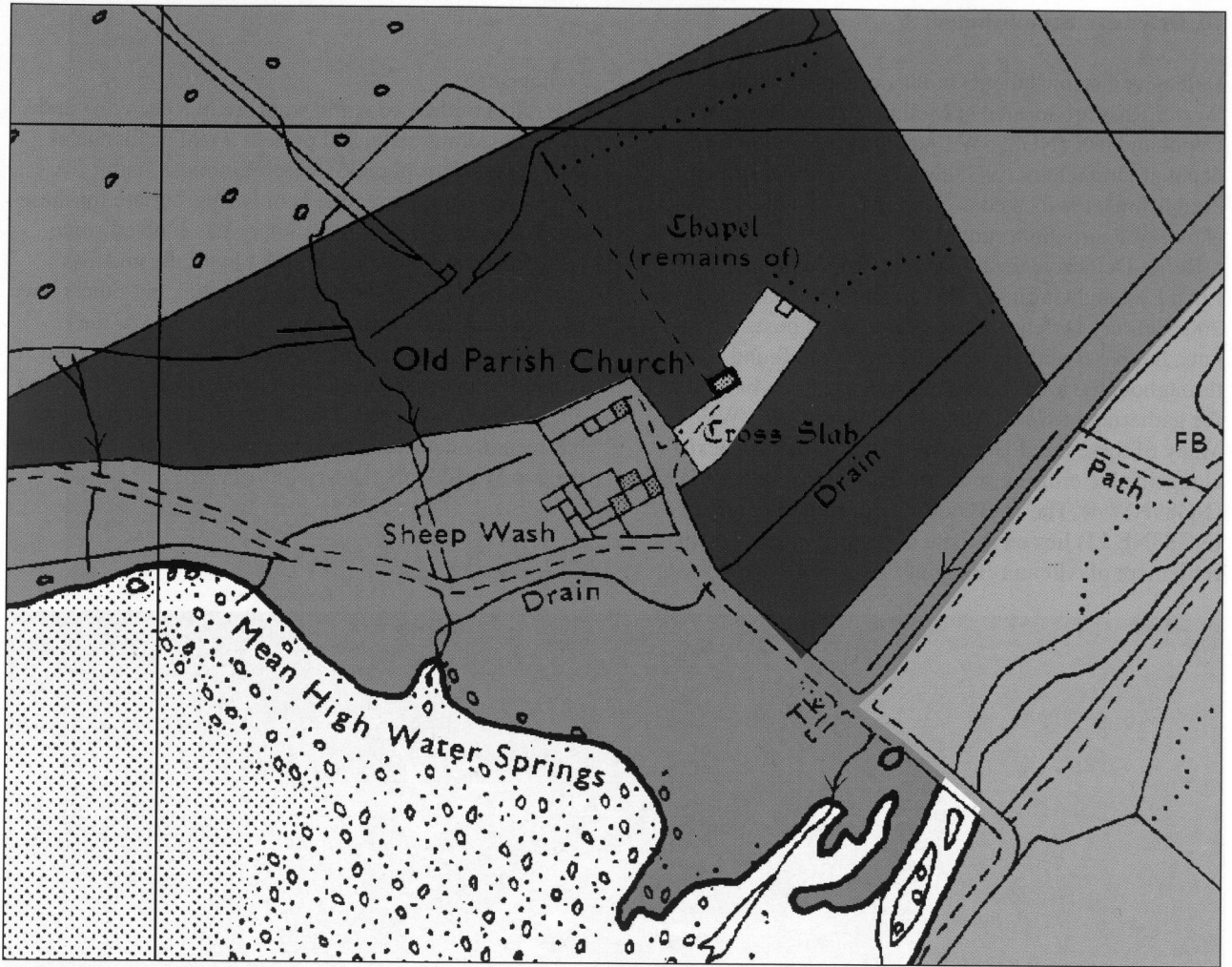
*The incised cross-slab of Cloch Mhor Mac Cuagan currently stands in the churchyard at Applecross. SC 450272*



- |   |                            |   |                      |
|---|----------------------------|---|----------------------|
|  | 18th-20th Century Cemetery |  | Other Land           |
|  | Water                      |  | National Scenic Area |

Map 13 Historic Land-use Assessment: Ritual Area.





- 17th-20th Century Cemetery
- Designed Landscape
- Fields and Farming
- Moorland and Rough Grazing
- Woodland and Forestry

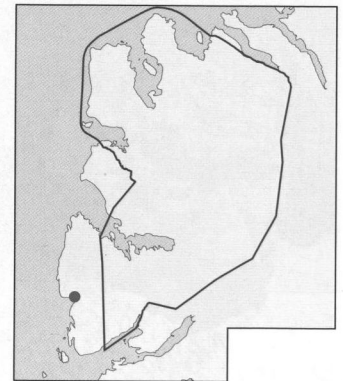


Fig. 9 The cemetery at Applecross is located on an early monastic site established in AD 673 by St Maelrubha (NG74NW 7).

## 10. Defensive Establishment

Defensive Establishments in the current landscape of Wester Ross are located at Mellon Charles Royal Navy Depot and pier (NG89SW 5) and Loch Ewe Oil fuel depot at Drumchork (NG88NE 24). A further military establishment is located at Sand (NG 6800 4901), which is part of a torpedo testing range.

Relict Defensive Establishments are numerous around Loch Ewe and Gairloch. These comprise a variety of 20th Century Defence Sites. Observation posts, Nissen huts, hut bases and gun emplacements are found throughout the area. Loch Ewe was used as a base for the gathering of North Atlantic convoys during WW II. Many of these relict Defensive Establishments coexist alongside the crofting settlements as at Rubha nan Sasan (NG89NW 4). The NATO oil fuel depot at Loch Ewe (NG88NE 13) lies on the site of the pre-improvement settlement of Allt an t-Slugain.

### *Management*







The relics of the two world wars are in a decaying and often dangerous state, and present a real challenge as they arouse considerable interest amongst visitors. A stable management regime is most appropriate for these areas. The presence of the military has enabled some relict landscapes to survive both physically and as a feature of historical and tourist potential, but others have been destroyed by military use. Any change to the current management regime should consider whether continuity in some form is possible before any dramatic alternative is proposed. The Defence of Britain project has recently gathered information on military sites from the two World Wars (Lowry (ed.) 1998).



*Aerial view of the 20th century coastal battery at Rubha nan Sasan on Loch Ewe. Note the area of traditional peat cutting just behind the defence site. SC 769685*

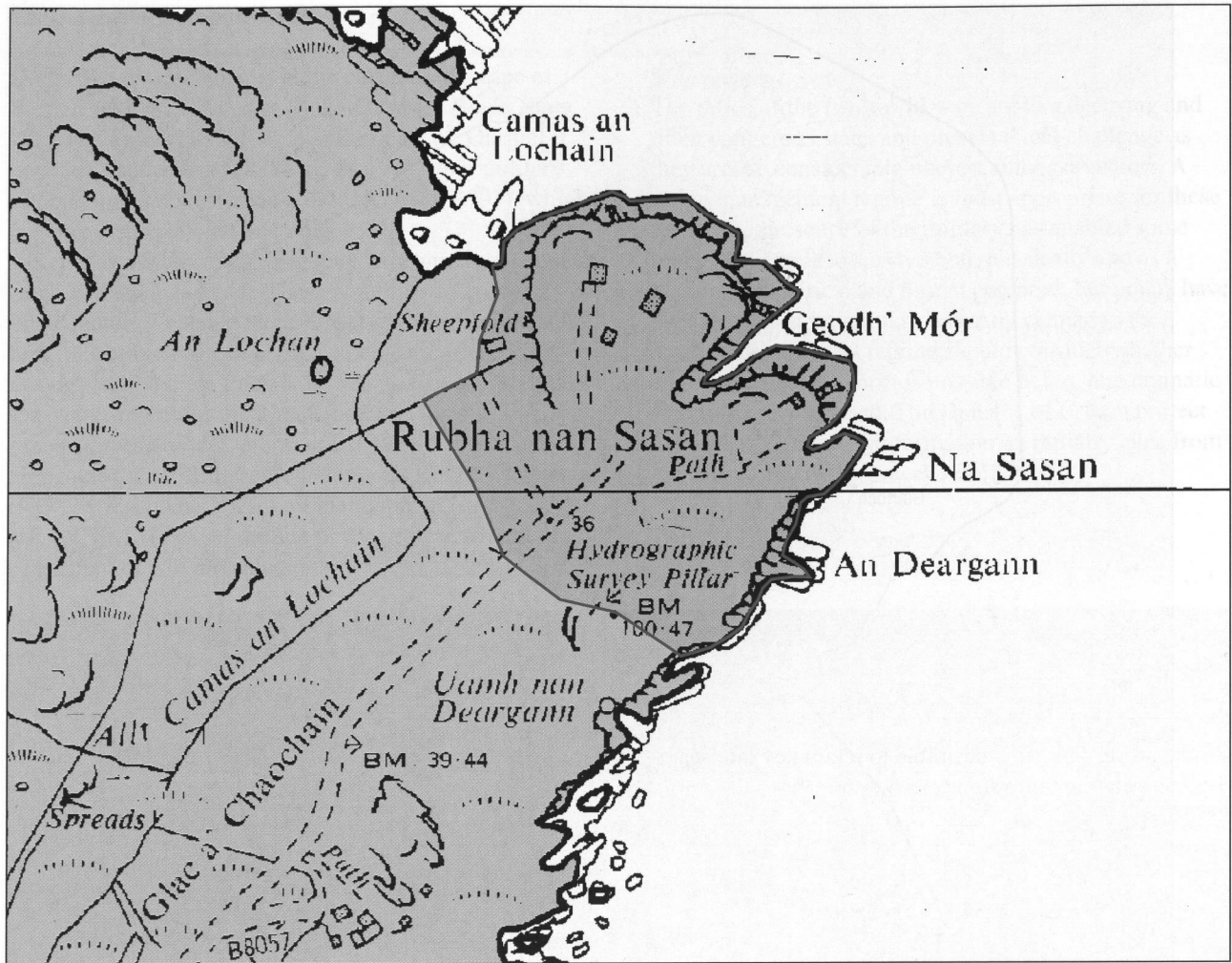




- |   |  |   |                      |
|---|--|---|----------------------|
|  | 20th Century Military Camp                     |  | Water                |
|  | Relict 20th Century Defence Site               |  | Other Land           |
|  | Medieval Castle and Prehistoric Fortified Site |  | National Scenic Area |

Map 14 Historic Land-use Assessment: Defensive Establishment.





- Relict 20th Century Defence Site
- Other land

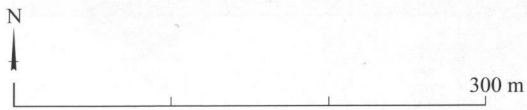
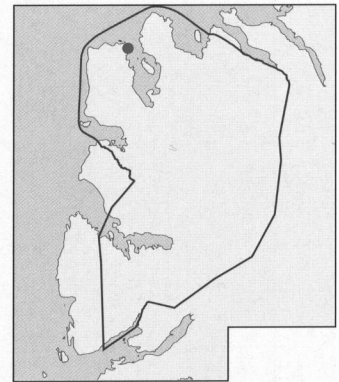


Fig. 10 Relict military establishments surrounding Loch Ewe (NG89NW).

## 11. Transport

With the exception of Plockton Airport, there are no transportation features large enough to be mapped in this exercise.

In the pre-modern era a number of drove routes are known to have crossed the area, e.g. that from Poolewe down the west side of Loch Maree but, as with many droving routes, its precise course is difficult to ascertain. In recent years road links have improved throughout Wester Ross. During the 1970s a new road linking Shieldaig to Applecross was built. Previously, the only vehicular access to Applecross was via the 1822 Parliamentary road over the infamous Bealach na Ba.

The Dingwall and Skye railway, opened in 1862; originally, it went only as far as Strome Ferry, but was extended to Kyle of Lochalsh in 1897. Today, trains pass through Wester Ross on the way to Kyle of Lochalsh, with local stations at Garve, Achnasheen, Strathcarron, Attadale, and Strome Ferry. Until the 1950s Applecross had its own boat connection between Toscaig and Kyle of Lochalsh.

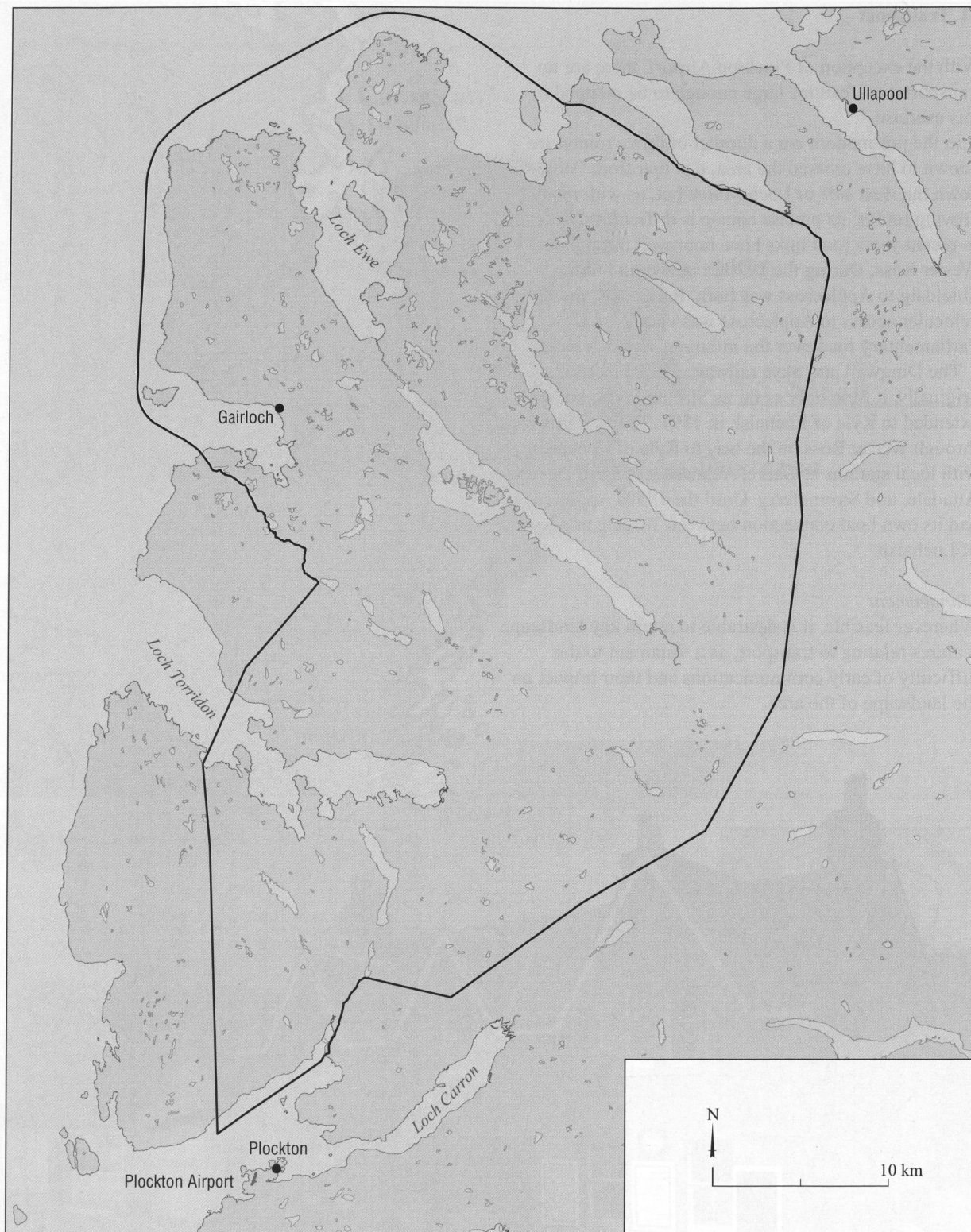
### *Management*





Wherever feasible, it is desirable to retain key landscape features relating to transport, as a testament to the difficulty of early communications and their impact on the landscape of the area.



*The Dingwall and Skye Railway opened Strathcarron railway station in 1870. The station is still in use today. SC 495069*





- |   |  |
|---|--|
|  20th Century Airfield |  Other Land           |
|  Water                 |  National Scenic Area |

Map 15 Historic Land-use Assessment: Transport



## 12. Mineral, Waste and Peat Industries

In general, areas of peat extraction are juxtaposed with areas of post-medieval to modern settlement. Good examples of domestic peat cuttings are visible adjacent to the relict crofting township of Mellangaun (NG 8106 8916) and north of the modern settlement of Cove (NG 8127 9189). Although traces of relict peat extraction survive widely in Wester Ross, it has only proved possible to map the most visible during the course of the HLA survey; intensive field survey would be required to record this most ubiquitous of remains

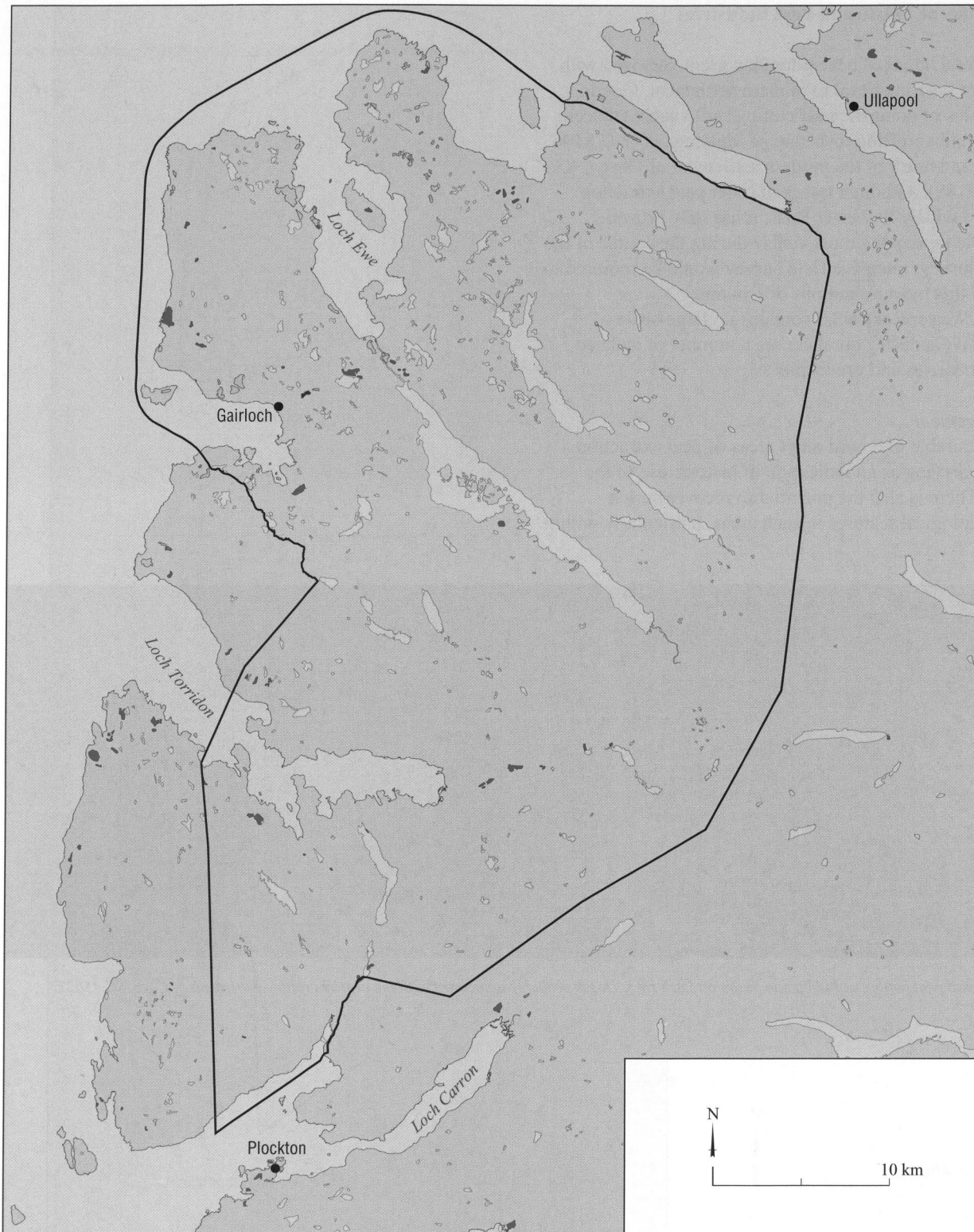
The Wester Ross NSA contains no large-scale extractive industry but there are a number of isolated stone quarries and gravel pits.









### *Management*

It is desirable to record relict areas of peat extraction and quarrying as an indication of historic use of the land. There is also the potential to recover buried archaeological features in such areas, particularly within peat.



*Traditional peat cutting at Rubha nan Sasan on Loch Ewe. This is probably associated with the nearby crofting settlement of Cove. SC 450272*



- |   |  |   |                      |
|---|--|---|----------------------|
|  | Late 20th Century Opencast                     |  | Water                |
|  | 19th-20th Century Quarry                       |  | Other Land           |
|  | 18th-20th Century Peat Extraction: Traditional |  | National Scenic Area |
|  | Relict 19th-20th Century Mining Area           |   |                      |
|  | Relict Peat Extraction: Traditional            |   |                      |

Map 16 Historic Land-use Assessment: Mineral, Waste and Peat Industries.

### 13. Water Bodies

Water Bodies recorded in the HLA are mostly natural lochs and inlets, which are found throughout the NSA. The latter are supplemented by a number of hydro-electric schemes, including those at Loch Bad an Scalaig (NG 8530 7112) and Garbhaig (NG86NW), and various reservoirs, e.g. Loch Lundie (NG 8070 3170).

The only fish farm to be mapped by HLA lies at Cauldorran (NG84SW). The 18th-19th Century Fish-traps on Loch Torridon (NG 8645 5705 and 9892 5440), Loch Kishorn (NG 8101 4108) and at Applecross (NG 7150 4494) and Gairloch (NG 8075 7267) remain as relict shoreline features. These comprised areas enclosed by either wooden fences or stone dykes, and are located in the inter-tidal zone. Tidal fishing with nets or traps constructed of wattles has a long history, and examples have been found in many parts of the Scottish coast, particularly on the tidal runs of estuaries.

#### *Management*

These features have survived in a relatively stable environment since their active use ended. They are obviously significant in the understanding of the economy and society of the past, and it is important that provision be made for protection and recording should they be threatened, for example, by managed retreat induced by climate change.



*View from Ullapool looking across the sea loch of Loch Broom. Sea lochs throughout Wester Ross are used for fishing and as avenues of communications. SC 401761*



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# Appendix

## Glossary of Historic Land-use Types

### Introduction

The Historic Land-use Assessment (HLA) is a map of the extent of past and present land-use areas defined by period of origin, form and function. It is compiled at a scale of 1:25,000, using the relevant OS map as background. Because of the scale of the map, Historic Land-use Types of less than 1 hectare are too small to be mapped.

### Data Sources

The following data sources are consulted in the creation of HLA polygons:

National Monuments Record of Scotland database and index maps 1:10,000  
OS 1:25,000 paper maps  
OS Landline Basic Scale digital maps  
OS 1st edition 6-inch maps  
1988 All Scotland Survey 1:24,000 aerial photographs  
MLURI Land Cover maps 1:25,000  
Forestry Commission Woodland database

Additional sources, such as the *Burgh Surveys*, the *Statistical Accounts* and other editions of the OS map are consulted where appropriate. Recourse is also made to secondary sources to aid the interpretative process.

### Field Checking

Field checking is an essential part of the HLA process, as it is important to be confident of the validity of the desk-based assessment. The aim of field checking is to confirm as many of the land-use types as possible. Selective fieldwork is carried out to check specific questions of interpretation, which cannot be resolved from the data sources outlined above. A database organised by OS 1:10,000 quarter-sheet is maintained of the areas checked.

### Historic Land-use Categories

Historic Land-use Categories comprise the fourteen major national patterns of historic land-use, viz:

1. Fields and Farming
2. Planned Village
3. Crofting
4. Built-up Area
5. Designed Landscape
6. Woodland and Forestry
7. Moorland and Rough Grazing
8. Recreation Area
9. Ritual Area
10. Defensive Establishment
11. Water Body
12. Transport
13. Mineral, Waste and Peat Industries
14. Energy Establishment.

The categories are made-up of one or more Historic Land-use Types.

### Historic Land-use Types

Within the 14 Historic Land-use Categories, there are 52 Historic Land-use Types, which form the basic building blocks of the map. Included amongst the Types are two (Natural Water Body and Sea-shore), which, although not strictly land-use types, are needed to complete the map. Each type is characterised by its period of origin, as well as by its form and function. By far the greater number are 18<sup>th</sup> century, or later, in date. As the attributes reflect this characterisation, analysis of the assessment data can be carried out by type, period or category.

### Historic Land-use Period

The period of each Historic Land-use Type is applied as an indication of its period of currency. This is based upon the current archaeological and historical understanding of the particular Land-use Type. For Historic Types dating from before the modern era, period is defined by historical age, e.g. Medieval; for those of more recent centuries, a century-to-century span, or part thereof, is applied which matches as closely as possible the currency of use. This means that there are types, which have overlapping periods of currency, because of the diachronic historical processes involved.

### Relict Categories

The Relict Types have also been grouped into Categories. Like the Historic Land-use Categories, Relict Categories reflect the survival of major national patterns of past land-use in the landscape, either as Relict Historic Land-use Types or as Relict Archaeological Types. These Categories may comprise one or more Relict Type. There are sixteen Relict Categories:

1. Fields and Farming
2. Planned Village
3. Crofting
4. Built-up Area
5. Designed Landscape
6. Woodland and Forestry
8. Recreation Area
9. Ritual Area
10. Defensive Establishment
11. Water Body
12. Transport
13. Mineral, Waste and Peat Industries
15. Settlement and Agriculture
16. Hunting Trap or Hunting Park
17. Cropmark Site
18. Artefact Scatter

The last four Relict Categories five are exclusively archaeological, while the remainder have corresponding Historic Land-use Categories. Since an area may have up to three Relict Types, it may also have up to three different Relict Categories.

### **Relict Types**

Some Historic Land-use Types, or parts of types, are no longer maintained for their original purpose, but have left a visible trace in the landscape. These are Relict Historic Land-use Types: there are 20 at present, and they are indicated in the Glossary for Historic Land-use Types by the letter R. In addition, there are 32 Relict Archaeological Types, which represent archaeological features no longer used for their original function. Like the Historic Types, these are defined by their period of origin and their form and function.

The complexity of past land-use means that, on occasion, there are up to three relict types (see data structure) in the same area. Where there is such a palimpsest, the relict types are ordered from youngest to oldest in the data structure.

As with all areas within the HLA, Relict Types have to be sufficiently extensive (1 ha) to be mapped. Many archaeological sites are, therefore, too small to be mapped by HLA. Information on such sites is available either on line (CANMORE and CANMAP) from the NMRS (see RCAHMS website) or from the relevant local SMR.

### **Relict Period**

This is organised on the same basis as Historic Land-use Period (see above), but ranges in time as back as far as the Mesolithic.

## **Historic Land-use Types listed by Category**

The codes used in data collection appear within brackets after the description. The letter R after the code denotes that the Type has an equivalent Relict Type.

### **1. Fields and Farming**

**18th-19th Century Rectilinear Fields** - standard pattern of rectilinear fields with associated farmsteadings and structures, typical of the agricultural improvements. [1] R

**18th-19th Century Planned Rectilinear Fields** - rectilinear fields with parallel boundaries, including contemporary steading, often found where an improved farm has been laid out to a single plan. [31] R

**18th-19th Century Reverse-S Shaped Fields** - field boundaries, which preserve the reverse-S shape of pre-improvement rig. [43] R

**18th-19th Century Subrectangular Fields** - fields boundaries, subrectangular or oval on plan, which may incorporate pre-improvement field boundaries, typical of Galloway. [44] R

**19th-20th Century Amalgamated Fields** - enlarged fields, created by the amalgamation or reorganisation of rectilinear fields. [2]

**Late 20th Century New Field** - recently improved fields with new boundary fences; for instance, new fields formed in an area of former rough pasture or parkland, typically larger than rectilinear fields. [3]

**Late 20th Century Unenclosed Improved Grassland** - areas of pasture showing no evidence of enclosure but some form of improvement; for instance, clover, fertilising, ploughing, reseeding, or drainage. [4]

**Late 20th Century Industrial Scale Farming Units** - large-scale constructions for farming enterprises, such as poultry sheds, fish farms, market gardens etc. [33]

**18th-19th Century Pre-improvement Field Boundaries** - where improvement fields incorporate the boundaries or edges of pre-improvement fields, except for the special case of reverse-S shaped boundaries (see 43). [52]

### **2. Planned Village**

**18th-19th Century Planned Village: Agricultural** - small planned settlement clusters built to house workers for farming activities. [10]

**18th-19th Century Planned Village: Industrial/Fishing** - small planned settlement clusters built to house workers for mining, industrial and fishing activities. [36] R

**Medieval Planned Village: Agricultural** - small rural settlement clusters with house-plots arranged in rows, such as Midlem in Roxburghshire. [51]

### **3. Crofting**

**18th-19th Century Allotments** - planned system of allotments, or smallholdings, with or without settlement, sometimes allocated to households in a planned village.



The pattern of field boundaries will be regular, obeying one or two axes. [39] R

**18th-19th Century Smallholdings** - irregular pattern of small fields belonging to smallholdings, representing crofts, or pendicles. [40] R

**18th-19th Century Crofting Township** - a group of allotments, or crofts, arranged either in strips or squares, with associated croft structures, typical of the Highlands and Islands. The buildings may or may not be dispersed amongst the crofts. [6] R

**Early 20th Century Smallholdings** - rectilinear smallholdings awarded to WW I veterans, often found near to conurbations. [41] R

**18th-19th Century Pre-improvement Field Boundaries** - where improvement fields incorporate the boundaries or edges of pre-improvement fields, except for the special case of reverse-S shaped boundaries (see 43). [52]

#### 4. Built-up Area

**Medieval Urban Core** - urban cores in towns and cities, preserving their medieval street plan and/or property lay-out. Any burgh foundation pre-18<sup>th</sup> century may be included. [8]

**18th-20th Century Urban Area** - built up areas of housing, schools, universities, hospitals and associated structures, from the 18<sup>th</sup> century onwards. It includes any housing estate of recent origin. [7]

**19th-20th Century Industrial and Commercial Area** - areas of factories (light and heavy), mills, open-air markets, shopping centres (malls), communication centres (telecommunication masts, civil radar stations etc.). [11] R

**20th Century Summer Houses** - modest dwellings rented from a landowner primarily for use as a summer residence. [46]

#### 5. Designed Landscape

**17th-19th Century Policies and Parklands** - estates with designed policies, parklands, and landscaping, including associated woodlands, avenues of trees and artificial water bodies. Related dataset –Historic Gardens and Designed Landscapes, jointly created by HS and SNH. [18] R

#### 6. Woodland and Forestry

**20th Century Coniferous Plantation** - areas of mainly coniferous plantations, with no reference to species composition; areas of planting, ground ripping, immature or mature stands, felled etc. are treated as a single type. Related dataset – Forestry Commission's Woodland Inventory [12]

**17th-20th Century Managed Woodland** - woods, possibly managed for timber production by traditional means; for instance: coppicing, and relict areas of remnant 'native pine woodlands'. Much of this woodland is classified by SNH as 'Ancient Woodland'. Related dataset – SNH's Woodlands. [19]

**Late 20th Century Woodland Plantation** - These include areas that are subject to Woodland Grant

Schemes and Forestry Commission plantings post 1988. Some are natural regeneration schemes. The full extent of the scheme is indicated although this will include areas left unplanted. [50]

#### 7. Moorland and Rough Grazing

**Prehistoric to Present Rough Grazing** - pasture areas showing no visible evidence of recent agricultural improvements, includes mountainous areas of the highlands with low grazing value. These areas often include the remains of relict archaeological landscapes, but have evolved into their present extent as a result of a process of woodland clearance, grazing, and episodes of agriculture since early prehistory. [5]

**Late 20th Century Drained Rough Grazing** - pasture with open drainage ditches; interconnected drainage systems, rectilinear, dendritic, or curvilinear. [37]

**Late 20th Century Deer Lawn** - Grassland areas currently maintained for deer pasturage, within a wooded area, e.g. Glen Lui, Mar Lodge Estate. [42]

**Late 20th Century Managed Moorland** - areas of heather moor with evidence of muirburn, usually managed in association with grouse shooting - without drainage. [13]

**Late 20th Century Drained Managed Moorland** - heather moor with open drainage; interconnected drainage systems, rectilinear, dendritic, or curvilinear, for grouse shooting. [38]

#### 8. Recreation Area

**19th-20th Century Recreation Area** - for instance: race courses, motor racing circuit, campsites, caravan sites, and associated areas, including monuments in care. [17 & 35] R

**19th-20th Century Golf Courses** - designed golfing landscapes and associated structures. [14]

**Late 20th Century Ski Area** - slopes, tows, and associated structures. [15]

**Late 20th Century Country Park** - area managed primarily for recreation purposes, where known, whether or not formally a designated country park. [16]

#### 9. Ritual Area

**17th-20th Century Cemetery** - burial areas and associated structures. [32] R

**19th-20th Century Monastery** - monasteries, nunneries, churches and cathedrals of any religious denomination. [9]

#### 10. Defensive Establishment

**20th Century Military Camp** - delimited areas for military use - training grounds, buildings, housing. [21]

#### 11. Water Body

**19th-20th Century Reservoir** - modified or artificial water bodies for drinking water, hydro-electric power production, etc. [22] R

**Natural Water Area** - lochs etc. [0]

**Sea-Shore** - inter-tidal zone lying between high and low tide. [47]

## 12. Transport

**Late 20th Century Roads** - motorways, major roads and associated structures, including junctions, service areas, car parks (e.g. Park and Ride sites). [23]

**19th-20th Century Railway** - and associated structures, marshalling yards, stations. [24] R

**20th Century Airfield** - commercial and military airfields and strips with associated structures. [20] R

**18th-19th Century Canal** - artificial waterway or canalised river and associated structures including locks and aqueducts. [48] R

**19th-20th Century Port** - artificial harbour, including quays, warehouses and breakwaters. [49]

## 13. Mineral, Waste and Peat Industries

**19th-20th Century Mining Area** - associated with any extraction industry. [25] R

**Late 20th Century Landfill** - associated with refuse, commercial and building fill. [26]

**19th-20th Century Quarry** - all types, e.g. stone, mineral. [27]

**Late 20th Century Opencast** - all types; e.g. coal, sand, gravel. [28]

**20th Century Peat Extraction: Commercial** - modern extraction (surface and subsurface), milling. [29] R

**18th-20th Century Peat Extraction: Traditional** - traditional spade-dug extraction. [30] R

**Late 20th Century Restored Agricultural Land** - land backfilled or restored from open-cast or similar activity, usually as pasture, where known. [34]

## 14. Energy Establishment

**Late 20th Century Power Station** - power stations, wind farms etc. [45]

## Relict Historic Land-use types Grouped by Category

These are the twenty Historic Land-use Types, which occur as Relict Types. The types are grouped by the same Historic Land-use Categories as above and the codes used in data collection are listed in brackets after the description.

### 1. Fields and Farming

**18th-19th Century Rectilinear Fields** - standard pattern of rectilinear fields with associated farmsteadings and structures, typical of the agricultural improvements. [104]

**18th-19th Century Planned Rectilinear Fields** - rectilinear fields with parallel boundaries, including contemporary steading, often found where an improved farm has been laid out to a single plan. [123]

**18th-19th Century Reverse-S Shaped Fields** - field boundaries, which preserve the reverse-S shape of pre-improvement rig. [138]

**18th-19th Century Subrectangular Fields** - fields boundaries, subrectangular or oval on plan, which may incorporate pre-improvement field boundaries, typical of Galloway. [143]

### 2. Planned Village

**18th-19th Century Planned Village: Industrial/Fishing** - small planned settlement clusters built to house workers for mining, industrial and fishing activities. [125]

### 3. Crofting

**18th-19th Century Allotments** - planned system of allotments, or smallholdings, with or without settlement, sometimes allocated to households in a planned village. The pattern of field boundaries will be regular, obeying one or two axes. [109]

**18th-19th Century Smallholdings** - irregular pattern of small fields belonging to smallholdings, representing crofts, or pendicles. [134]

**18th-19th Century Crofting Township** - a group of allotments, or crofts, arranged either in strips or squares, with associated croft structures, typical of the Highlands and Islands. The buildings may or may not be dispersed amongst the crofts. [124]

**Early 20th Century Smallholdings** - rectilinear smallholdings awarded to WW I veterans, often found near to conurbations. [129]

### 4. Built-up Area

**19th-20th Century Industrial and Commercial Area** - areas of factories (light and heavy), mills, open-air markets, shopping centres (malls), communication centres (telecommunication masts, civil radar stations etc.). [112]

## **5. Designed Landscape**

**17th-19th Century Policies and Parkland** - estates with designed policies, parklands, and landscaping, including associated woodlands, avenues of trees and artificial water bodies. Related dataset –Historic Gardens and Designed Landscapes, jointly created by HS and SNH. [122]

## **8. Recreation Area**

**19th-20th Century Recreation Area** - for instance: race courses, motor racing circuit, campsites, caravan sites, and associated areas, including monuments in care. [133]

## **9. Ritual Area**

**17th-20th Century Cemetery** - disused burial areas and associated structures. [114]

## **11. Water Body**

**19th-20th Century Reservoir** - previously modified or artificial water bodies, drained of water and surviving as earthwork. [142]

## **12. Transport**

**19th-20th Century Railway** - and associated structures, marshalling yards, stations. [116]

**20th Century Airfield** - commercial and military airfields and strips with associated structures. [128]

**18th-19th Century Canal** - artificial waterway or canalised river and associated structures including locks and aqueducts. [144]

## **13. Mineral, Waste and Peat Industries**

**19th-20th Century Mining Area** - associated with any extraction industry. [115]

**20th Century Peat Extraction: Commercial** - modern extraction (surface and subsurface), milling. [121]

**18th-20th Century Peat Extraction: Traditional** - traditional spade-dug extraction. [113]

## **Relict Archaeological Types Grouped by Category**

These are the historic types that survive only as relict elements of the landscape. Like Historic Land-use Types, they are grouped by Category. The four Categories, which have equivalent Historic Land-use Categories are listed first and the four purely archaeological Relict Categories after that, again with the codes in brackets.

## **6. Woodland and Forestry**

**Post-medieval Plantation** - banks surrounding former area of managed woodland. [135]

## **9. Ritual Area**

**Early Prehistoric Ritual and Funerary Site** - cemeteries, burial mounds, ring ditches, henges, standing stones, generally of Neolithic and Bronze Age date etc. [117]

**Early Medieval Christian Site** - early Christian monasteries, churches, burials etc. [132]

**Medieval Monastery** - 12th century to Reformation e.g. Melrose Abbey. [110]

## **10. Defensive Establishment**

**Later Prehistoric Fortified Site** - hillforts, generally of 1st millennium BC or AD date. [106]

**Roman Military Site** - any Roman military site. [108]

**Medieval Castle** - earthwork or stone castle pre-c.1550. [111]

**Post-medieval Fortification** - an artillery fort and/or military establishment. [139]

**20th Century Defence Site** - WWI-WWII camps, gun placements, observation posts etc. [119]

## **11. Water Body**

**18th-19th Century Fish-Traps** - a wooden or stone structure defining an area within the inter-tidal zone for the purpose of fishing. [141]

**19th-20th Century Timber Ponds** - a defined area of water used for the seasoning and storing of wood such as the timber basins at Firhill. [140]

## **13. Mineral, Waste and Peat Industries**

**Prehistoric Quarries** - extensive remains of early prehistoric stone extraction such as Boddom in Aberdeenshire. [137]

**Post-medieval Turf Stripping** - areas where the surface layer of turf has been removed for a variety of purposes, leaving a pattern of small rectilinear scars. The date range of this activity is insecure, but probably ceased with the abandonment of feal dykes and turf in building. [127]



## **15. Settlement and Agriculture**

**Mesolithic Shell Midden** - Mesolithic and later. [118]

**Early Prehistoric Settlement and Agriculture** -

Neolithic-early Bronze Age agricultural systems and associated settlement structures. [136]

**Later Prehistoric Settlement and Agriculture** -

agricultural systems with associated settlement structures; for instance, hut circles. [100]

**Early Medieval Settlement and Agriculture** - early Medieval settlement with associated field/agricultural systems, e.g Pitcarmick-type buildings or Norse settlement. [130]

**Medieval Assart** - an enclosed area of settlement and agriculture which is delimited by a deer-dyke in a medieval hunting forest. [126]

**Medieval Manorial Enclosure** - enclosed settlements of manorial elite, including moated sites and granges. [131]

**Medieval/Post-medieval Settlement and Agriculture** - Pre-Improvement agriculture and associated settlement (including head-dykes). [101]

**Medieval/Post-medieval Shielings** - group of at least 5 shieling-huts of medieval or post-medieval date. [103]

**Medieval/Post-medieval Stock/Sheep Enclosures** - sheep or stock enclosures, generally 17th to 19th century. [102]

**18th-19th Century Water Meadows** - a system of irrigated ridges fed by a lade to provide an improved meadow environment [145]

**Medieval-Modern Land Reclamation** - areas of coastline or low-lying ground taken in for agriculture or grazing, either by dyking and draining, or by taking advantage of natural estuarine or shoreline processes. [146]

## **16. Hunting Trap or Park**

**Medieval Deer Park** - an enclosure defined by a deer-dyke, generally comprising a bank and internal ditch. [107]

**Medieval/Post-medieval Deer Trap** - deer-dykes, defining an open-ended or funnel-shaped area into which deer are driven to be killed, typically surrounding a natural gully or elrig. [120]

## **17. Cropmark Site**

**Prehistoric Cropmarks** - any prehistoric cropmark features. [200]

**Medieval/Post-medieval Cropmark Rig** - Rig and furrow visible as cropmarks. [201]

**Roman Cropmarks** - Roman military and related sites reduced to cropmark. [202]

## **18. Artefact Scatter**

**Prehistoric Lithic Scatter** - flints and other lithics retrieved from field walking/ploughing. [210]

**Medieval Pottery Scatter** - pottery retrieved from field walking/ploughing. [211]

**Roman Finds Scatter** - pottery, glass, metalwork etc. retrieved from field walking/ploughing. [212]

**Note:** This is a list of Types identified in the areas covered by the end of May 2003. It is recognised that some additional Relict Archaeological Types may have to be added during the course of the assessment.

