

**SCOTTISH  
NATURAL  
HERITAGE**



No 111

**Ayrshire landscape assessment**

**Land Use Consultants**

**1998**

**SCOTTISH NATURAL HERITAGE**

**R E V I E W**

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**Report date:**

**1998**

**Report to:**

**Scottish Natural Heritage, East Ayrshire Council, North  
Ayrshire Council, South Ayrshire Council, Ayrshire  
Joint Structure Planning Unit, Enterprise Ayrshire**

**Contract No:**

**SW/21/96**



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This report should be cited as follows:

**Land Use Consultants** 1998. Ayrshire landscape assessment. Scottish Natural Heritage Review No 111.

Scottish Natural Heritage  
Publications Section  
Battleby, Redgorton, Perth PH1 3EW  
UNITED KINGDOM

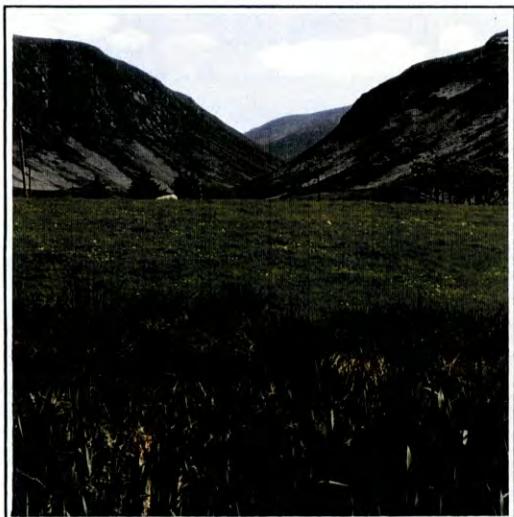
Scottish Natural Heritage  
Advisory Services  
2 Anderson Place, Edinburgh EH6 5NP  
UNITED KINGDOM

ISSN 1350-3111



# **AYRSHIRE**

## **LANDSCAPE ASSESSMENT**



**LAND USE  
CONSULTANTS**  
ENVIRONMENTAL  
PLANNING, DESIGN AND  
MANAGEMENT

**March 1998**

## **Preface**

This report forms part of the National Programme of Landscape Character Assessment, which is being carried out by Scottish Natural Heritage, in partnership with local authorities and other agencies.

The National Programme aims to improve our knowledge and understanding of the contribution that landscape makes to the natural heritage of Scotland.

This study was jointly commissioned by Scottish Natural Heritage, the Ayrshire Joint Structure Plan Committee (East, North and South Ayrshire Councils) and Enterprise Ayrshire and provides a detailed assessment of the landscape of Ayrshire. It considers the likely pressures and opportunities for change in the landscape, assesses the sensitivity of the landscape to change and includes guidelines indicating how landscape character may be conserved, enhanced or restructured as appropriate.

The report will be of interest to all those concerned with land management and landscape change. More specifically, it is intended to provide the landscape context for SNH staff responding to planning and land use related casework and for East, North and South Ayrshire Councils in the production of local and structure plans.

The views contained within this report represent those of the consultant - Land Use Consultants - and do not necessarily reflect the policies and views of the sponsors.

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# **EXECUTIVE SUMMARY**

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## **INTRODUCTION**

1. This section of the report provides an Executive Summary of the Ayrshire Landscape Assessment. The summary describes the background to landscape assessment, sets out the aims and objectives of this particular study, describes the method and approach and outlines the key study findings. Central to these findings are definitions of Regional Character Areas and Landscape Character Types, the analysis of forces for change and presentation of recommended planning and management guidelines. The section describes how the findings of the Ayrshire Landscape Assessment could be carried forward in the form of more detailed research.

## **BACKGROUND**

2. There is increasing concern by all government agencies to ensure that the concepts of sustainability and the effects of development upon the environment are reflected within the planning process. In particular, there has been a broadening of concern from simply protecting nationally or regionally important landscapes, to embrace the character of the wider landscape. There is now an emphasis on increasing the understanding of locally, as well as regionally or nationally important landscapes, and ensuring that the planning process assists in their conservation and enhancement. This is not an attempt to prevent development, but rather to ensure that the scale, rate and nature of change are in keeping with the character and capacity of the environment.
3. Recent National Planning Policy Guidance (NPPG), issued by the Scottish Office, has emphasised that development proposals should be assessed more rigorously in terms of their potential effects on the environment. Many development plans are now the product of a process of strategic environmental assessment, with characterisation of the environment providing a basis for the formulation of land use policies. In Ayrshire, the three councils forming the Ayrshire Joint Structure Plan Committee joined with Scottish Natural Heritage and Enterprise Ayrshire to commission a systematic assessment of landscape character, informing the preparation of the Structure Plan and Local Plans, and providing a baseline to facilitate informed decision making within the Structure Plan Area.
4. The study also forms part of Scottish Natural Heritage's ongoing programme of landscape character assessment throughout Scotland, aiming to improve understanding and knowledge of the contribution that landscape makes to the natural heritage of Scotland.

## **AIMS AND OBJECTIVES**

5. The aim of the study was to provide a landscape character assessment with a commentary on landscape change to support development plans for the area, to assist funding partners in policy development and to aid the evaluation of the impact of individual proposals for development or change within the study area.

6. Detailed objectives comprised the following:

- to provide a detailed description and analysis of the varying landscapes of Ayrshire;
- to consider the likely and existing pressures and opportunities for landscape change;
- to assess the sensitivity of these landscapes to change;
- to develop guidelines as to how landscape change can be accommodated;
- to develop guidelines as to how the differing landscapes can be conserved, enhanced, improved or restructured as appropriate;
- to identify key features of the landscape which can be used for Environmental Assessment of the development plans currently being produced, and recommend those features which may be appropriate for monitoring the performance of environmental policies within these plans.

## METHOD AND APPROACH

7. Ayrshire contains considerable diversity of landscape character resulting from the interaction of both natural and human influences on the area. This variation in landscape character has been analysed using a systematic methodology based upon a combination of desk work and field survey. The method was based upon that developed by Land Use Consultants for the Countryside Commission for Scotland (now Scottish Natural Heritage) and published in 1991 as *Landscape Assessment: Principles and Practice*. This approach seeks to combine objective and subjective assessment of the landscape, and concentrates on the classification of the landscape into areas of distinct and relatively homogeneous character.
8. This method enables the character of the landscape to be described in a hierarchical framework. It is based on the identification and description of Regional Character Areas, Landscape Types and the identification of Landscape Units.
9. The main report is divided into two parts. The first explores the evolution of the landscape and some of the features which contribute to the character of Ayrshire's landscape. Key influences in the evolution of the landscape include the area's underlying geology and the profound effect that this has had upon landform; the significant forces of glacial and fluvial erosion which have modified the landform over many millennia, and the pattern of land use and settlement which has developed, partly in response to the physical character of the landscape. The description of typical features of the Ayrshire landscape includes physical features such as raised beaches and remnant volcanic hills, natural heritage resources, archaeological sites, built heritage and patterns of local vernacular.

10. The first part of the main report also includes a chapter describing the principal forces for change affecting the Ayrshire landscape. Setting the context for more detailed analysis of these changes in the second part of the report, the chapter highlights many of the key issues and suggests how they might be addressed through land use planning or landscape management. Topics covered include agriculture, forestry and woodland, urban expansion, building in the countryside, tourism and recreation, road developments, energy related development and climate change.
11. The second part of the main report comprises a description of Regional Character Areas and Landscape Character Types. For each of the Landscape Character Types, the report provides descriptions of the landscape and the main forces for change affecting it and outlines how these pressures, together with the adverse effects of past change might be addressed through planning and landscape management. The Regional Character Areas and more detailed Landscape Character Types are described in summary below.

## **Regional Character Areas**

12. Regional Character Areas are recognisable as distinct landscape 'regions' at the broad scale, based on general characteristics such as geology, landform, soils, ecological associations, land cover and historical patterns of settlement and land use. These areas can provide a framework for strategic planning and land use policies, and contribute to the regional characterisation of the Scottish landscape as a whole. We have identified eight Regional Character Areas. It will be appreciated that several of these areas extend well beyond the boundaries of Ayrshire. The Regional Character Areas are as follows:
  - Arran
  - Inner Firth of Clyde
  - Renfrew Heights
  - Ayrshire Basin
  - Ayrshire Rim
  - Southern Uplands
  - Carrick Hills and Valleys
  - Galloway Uplands

## **Landscape Character Types**

13. Landscape Character Types are tracts of countryside, defined at a more detailed level, which have a unity of character due to particular combinations of landform and landcover and a consistent pattern of constituent elements. The same landscape type may occur in different regional character areas, but will be distinguished by broader regional influences such as geology, soil or land use. In Ayrshire, a total of 22 landscape types have been identified. Five of these are further classified according to the presence or absence of large-scale commercial forestry.

14. The landscape types are as follows:

- raised beach coast
- lowland coast
- coastal fringe with agriculture
- coastal headlands
- coastal valley with policies
- coastal lowland moor
- Ayrshire lowlands
- broad valley lowland
- lowland river valleys
- upland river valleys
- lower dale
- upper dale
- intimate pastoral valley
- upland glen
- upland basin
- lowland hills
- foothills (with/out forestry)
- plateau moorlands (with/out forestry)
- rugged moorland hills and valleys (with/out forestry)
- southern uplands (with/out forestry)
- rugged granitic upland (with/out forestry)
- rocky volcanic island

15. From the above list of landscape character types, it will be evident that Ayrshire encompasses a wide variety of landscapes, ranging from the rich pastoral lowlands of the Ayr Basin, through the expansive plateau moorlands to dramatic upland summits such as those found in the northern part of Arran. The variation in landscape character reflects closely the area's geological structure, a factor which has had a determining influence on landform, vegetation patterns and, equally significantly, the distribution of human settlement and land use.

16. The Southern Upland Fault runs from south west to north east across central and southern Scotland, marking the transition from the upland hills which characterise much of Dumfries and Galloway and the Midland Valley to the north. The Fault runs across the southern part of Ayrshire where it has influenced the alignment of valleys such as the Girvan and the Stinchar, together with the orientation of the foothills, moorlands and ridges between them. To the south of the Fault lie bold uplands, modified significantly by glacial erosion, creating smoothly rounded hills and plunging U-shaped valleys. The rugged granite summits of the Merrick Range extend into the south east corner of Ayrshire, around Loch Doon. These are amongst the most remote and unsettled parts of Ayrshire. Commercial forests clothe large areas of the uplands.

17. To the north of the Southern Upland Fault, the landscape is lower and less complex, comprising an extensive basin focused on the coastal town of Ayr, and enclosed by a semi-circle of plateau moorlands and foothills which mark the watershed between Ayrshire and the Clyde and Lanark basins. Although areas of arable cultivation are found on better land along the coast, it is pastoral farming which characterises much of the basin. The area retains a dense network of hedges, hedgerow trees and small fields. Stone farmhouses crown low hills in the undulating basin. In combination, these characteristics create a pastoral landscape which is more intact than many of the parts of England with which Ayrshire is often compared.
18. Draining the basin are a series of river valleys. In their upper reaches, the rivers Gourock, Irvine, Ayr, Glenmuir, Nith and Troon have cut sizeable valleys into the surrounding rim of hills. These valleys became a focus for communication routes, settlement and industrial development, the latter based on the exploitation of water power for textiles and mineral deposits for the coal, iron and steel industries. In their lower reaches, these rivers flow through narrower, often incised valleys cut into the floor of the Ayrshire basin, again acting as a magnet for settlement.
19. Post glacial land and sea level changes created the raised beach complexes which are found along much of the Ayrshire coast. Usually, this landscape comprises a gently sloping terrace a few metres above the high water mark (representing the former beach) together with a steep escarpment representing the former cliffline. In many cases, these clifflines support rich broadleaf woodland, the canopy shaped by the force of prevailing winds. While these raised beach landscapes characterise those areas where the uplands reach the coast, within the lowland basin the coast is characterised by extensive dune systems, punctuated by more resistant rock headlands such as that at Troon. Much of the dune coast has been 'reclaimed' to provide land for urban expansion around towns such as Ayr, Prestwick and Troon. Other areas have been transformed into golf-courses or other recreation areas. Few areas of natural dune remain.
20. Several islands lie within the Ayrshire Structure Plan area. These include barely habited islands such as Little Cumbrae, Holy Island, and Ailsa Craig to the larger islands of Great Cumbrae and Arran. In addition to comprising important landscapes in their own right, these islands make an significant contribution to views across the Firth of Clyde from the mainland. Ailsa Craig, for example, is often visible as a steep sided silhouette, while on a clear day, the mountains of north Arran soar dramatically above the surrounding islands and coastline.

## **MANAGEMENT GUIDELINES**

21. The description of landscape types provides the basis for the formulation of recommendation on landscape management and planning. Analysis of the changes in land use and developments which are currently taking place within Ayrshire are reflected in the description of each landscape character type. This has informed the development of appropriate planning and management guidelines. In general, these recommendations reflect both the strength of landscape character and its quality. Three broad types of approach can be applied either individually or in combination:

- in areas where landscape character is strong and intact, the emphasis is placed upon conserving that the qualities and features which contribute to that character. The Ayrshire Lowlands, for example, retain a very strong pastoral character as a result of the small fields, generally intact hedges and lines of beech along field boundaries and roads. The emphasis of management recommendations here is to ensure that these features, which have been lost or are in decline in many other parts of the country, are recognised and managed appropriately;
  - in areas where landscape character has become weakened by change, the emphasis is generally placed upon addressing the cause of that change and on restoring character that has been lost. Often a pragmatic approach is necessary, particularly in respect of past development. Here it is often necessary to use screening to soften the edges of development and to ensure that future schemes are planned in a more sensitive manner and designed to reflect the use of local styles and materials. Another example is found in the coastal lowlands where large parts of the dune systems have been reclaimed to provide golf-courses. There are opportunities through appropriate vegetation management and landscaping to restore some of the coastal landscapes that have been lost or changed in the past, while retaining or even increasing their sporting interest;
  - in areas where profound change has resulted in the loss of landscape character, there can be scope for intervention in the form of landscape creation. With major forces for change, such as open-cast coal working, often the aim is to re-create pre-existing landscape features and character. Sometimes it may be appropriate to devise strategies which meet alternative aims, such as the creation of a new recreational resource or the use of the restored site for commercial forestry or wind power.
22. Key issues addressed by the planning and management recommendations include:
- the need to conserve and restore lowland pastoral landscapes;
  - management and restructuring of existing coniferous plantations within many of the upland areas;
  - the appropriate balance of forestry and open areas in the uplands;
  - the character and appearance of past urban expansion and urban fringe development;
  - the pressure for continued urban growth;
  - the importance of responding to vernacular building styles, local building materials, locations and layouts;
  - the direct and indirect landscape effects of major and minor road improvements;
  - coastal pressures relating to recreation, development and the potential effects of climate change;
  - the location, operation and restoration of open-cast coal sites;
  - landscape and environmental implications of industrial decline;
  - the potential for renewable energy development, particularly from wind power.

## **RECOMMENDATIONS FOR FURTHER STUDY**

23. Undertaken at a broad regional scale and embracing a wide range of issues, the study recommendations can provide only a starting point for the effective management of change. In the past, similar assessments have prompted the more detailed analysis and the preparation of strategies tailored to particular topic areas (such as wind power, or forestry) but set within the wider context of landscape character analysis provided by the study. In many cases, the identification of regional character areas and landscape character types has assisted in the preparation of strategic and local plans.
24. During the course of the Ayrshire landscape assessment, a number of issues were recognised as deserving more detailed study than could be achieved within the scope of the study. These could provide the basis of more detailed study by the local authorities, the Ayrshire Joint Structure Plan Team, Scottish Natural Heritage or others. They include:
- an analysis of existing urban fringe issues including visual intrusion, building design and materials, and landscape management. The work could inform the planning and management of such areas, for example exploring the scope for enhancement by screening or appropriate forms of new development, and the scope for improving the management of areas immediately adjacent to the urban edge, perhaps by community involvement;
  - the assessment of settlement and environmental capacity for further development. Several settlements have experienced considerable growth in recent decades and future housing allocations may result in continued pressure in coming years. An assessment of the capacity of existing settlements to accommodate further growth (including the assessment of landscape capacity) would provide a baseline for the assessment of different policy options. These might include urban based solutions based on the re-use of brownfield sites and urban intensification, continued peripheral growth, dispersion to and consolidation of smaller settlements, new settlements or even restraint;
  - the need for more detailed analysis of lowland landscape change, perhaps based on an historical analysis of field boundaries, tree loss and field sizes. This would help determine whether the landscape is stable or in decline, and the reasons for any decline. It would provide the basis for an analysis of the most appropriate form of management for the future;
  - the preparation of more detailed supplementary planning guidance on design issues with the aim of stimulating designs which respond to local styles and materials in a positive way. Such guidance could usefully emphasise process rather than simply product;
  - the preparation of more locally-specific guidance on forestry design and management, addressing issues to do with restructuring, new plantations and the promotion of multi-purpose woodlands which meet a range of objectives including landscape conservation and enhancement. This could build on the approach of recent work in Dumfries and Galloway;

- the preparation of a renewable energy strategy, examining the practicable potential for a range of renewable energy technologies including small scale hydro, biomass, forestry residues, energy from waste and wind power;
- an assessment of alternatives for declining and dispersed industrial settlements, embracing the potential for alternative forms of land management and tenure, including crofting;
- the potential for landscape enhancement associated with recreational infrastructure. This could include the scope for restoration of duneland habitats within golf-courses and the development of new recreation resources such as pedestrian or cycle ways along river valleys or disused railway lines.

# **1. INTRODUCTION**

---

## **ROLE OF THIS REPORT**

- 1.1. Land Use Consultants was commissioned in September 1996 to undertake a landscape character assessment of Ayrshire. The aims of the assessment, as set out in the study brief, are to:
  - produce in written and map form a detailed assessment of the landscape character of Ayrshire;
  - provide a tool for Scottish Natural Heritage staff to use in their day to day casework, including local planning and development control issues, and in particular to provide guidance on how various types of development or land use changes might best be accommodated within the different landscape character areas identified and their capacity to accommodate these changes;
  - provide information about landscape character for use by planning authorities in the preparation and review of their development plans, in the scoping and production of environmental assessments and in the consideration of other applications relating to changes in land use;
  - consider the likely and existing pressures and opportunities for landscape change and assess the sensitivity of the landscapes to these changes;
  - identify areas of landscape that are or may be under threat and find opportunities for the enhancement of features that contribute to landscape character;
  - develop guidelines indicating how differing landscapes may be conserved, enhanced or restructured as appropriate.
- 1.2. This report has been produced by Land Use Consultants to assist the client organisation and others in the formulation of policies for development and countryside management for Ayrshire. As such, the report sets out guidance and advice, but ultimately remains the professional view of the consultants.
- 1.3. The assessment is to be produced into two phases: These comprise the following:
  - (i) Phase I: Report of Survey;
  - (ii) Phase II: Planning and Management Guidance in Response to Landscape Change.
- 1.4. This document comprises a synthesis of the two phases of the study.

## **STRUCTURE OF THIS REPORT**

- 1.5. Part I of the report describes the physical and cultural evolution of the Ayrshire landscape and reviews the principal forces for change which have affected it in the recent past, or which may affect it in the future.

- 1.6. Part II of the report comprises the landscape classification. For each of 22 distinct landscape types, the report describes the current landscape character and the forces for change that are affecting it and sets out a series of management and planning guidelines which are designed to conserve and enhance the distinctive character of the Ayrshire landscape.

## **2. EVOLUTION OF THE LANDSCAPE**

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### **PHYSICAL INFLUENCES**

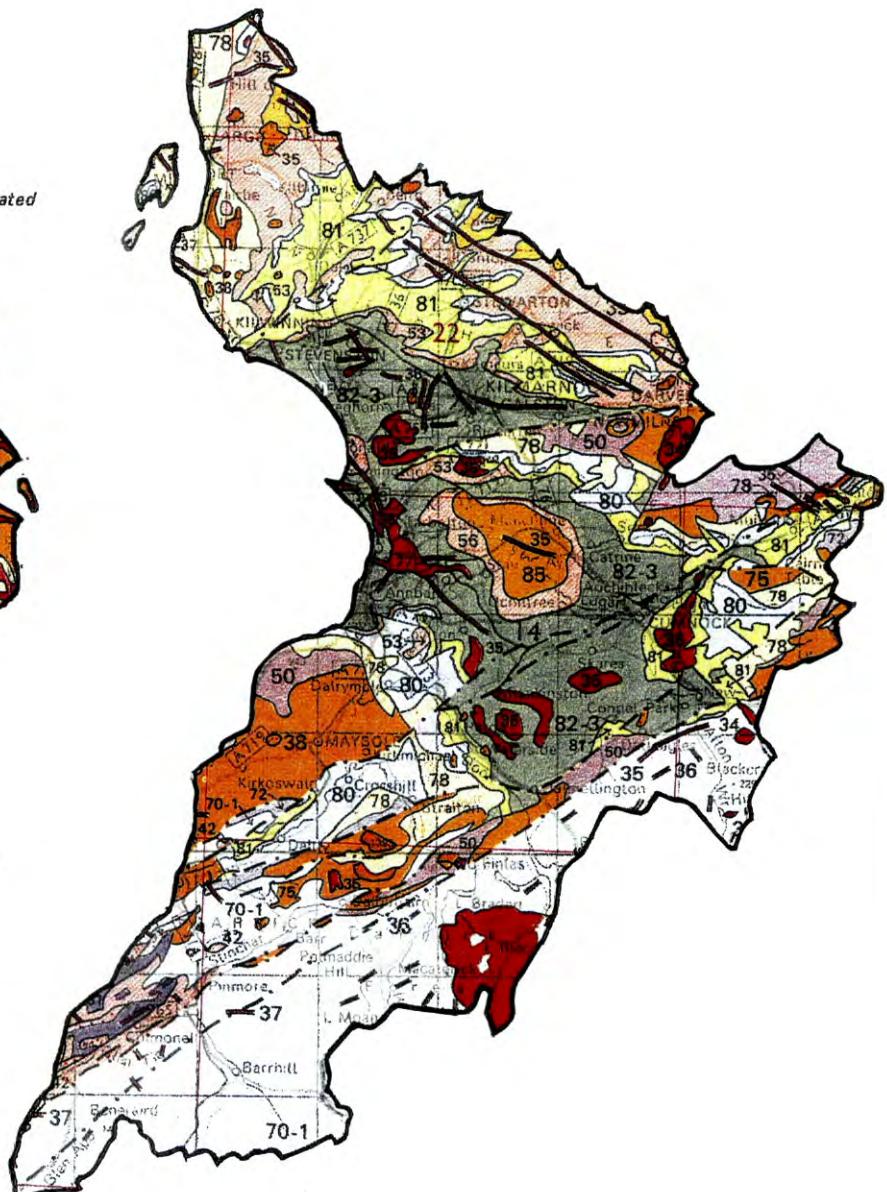
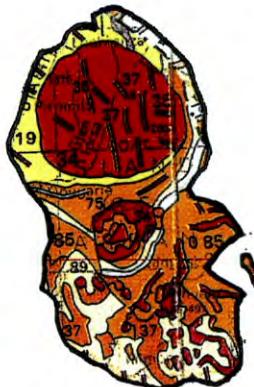
- 2.1. The following section of this chapter outlines the main physical processes which have determined the solid and drift geology, patterns of hydrology and topography of Ayrshire today. These attributes represent the physical structure of the landscape and are fundamental to its present character.

#### **Introduction**

- 2.2. The majority of Ayrshire lies within the Midland Valley of Scotland, the broad belt of comparatively low land (rift valley) which is bounded by the Highland Boundary Fault to the north, and the Southern Upland Fault to the south. The alignment of these faults is approximately from the south west to north east. Ayrshire occupies the entire western seaboard of the Midland Valley and extends beyond the Southern Upland Fault to encompass parts of the Southern Uplands along the boundary with Galloway. All of Ayrshire lies to the south of the Highland Boundary Fault with the exception of Arran which is bisected by the fault.
- 2.3. To the north of the Highland Boundary Fault, the geology comprises resistant metamorphic rocks of the Dalradian Complex. These generally include Quartz-mica-schists, slates and phyllites with many igneous intrusions typically of granite, basalt and dolerite. Only the northern half of Arran has these constituents, the effects of which are discussed in paragraph 2.21 below.
- 2.4. To the south of the Southern Upland Fault, the geology comprises ancient (Palaeozoic-Ordovician) sedimentary formations which generally include greywackes, shales and mudstones. These rocks, generally of dark grey and brown hues, are fairly resistant to denudation, and as a result form extensive ranges of rounded hills and plateaux between 1,000 and 2,500 feet AOD (c.300m-800m AOD).
- 2.5. These Ordovician rocks are disrupted by many igneous intrusions which include Porphyritic and Rhyolitic dykes and granite batholiths. The most significant is the Loch Doon Granite Intrusion which has determined the formation of southern Ayrshire's most dramatic mountain landscapes. This massive intrusion initially pushed its 'roof' of sedimentary rocks into a dome, the top of which was subsequently eroded leaving a central ridge of hard white granite (Mullwharcar, Hoodens Hill, and Craigmawhannal) surrounded by a rim of extremely resistant metamorphosed sedimentary rocks. The latter now represent the highest mountains and ridges, e.g. Kirrieroch Hill (786m); Tarfessock (697m); Shalloch on Minnoch (768m), and Gaiglee (523m). The central granite ridge is flanked by Tonalite Granite which has a higher proportion of plagioclase feldspar and is consequently less resistant to erosion. This differential has created a corridor on lower ground occupied by rivers and lochs, including Gala Lane, Carrick Lane, Lochs Riecawr and Macaterick.

- 2.6. During the Pleistocene period, this highland massif operated as a major ice centre from which glaciers and ice sheets flowed to north and south. A breach in the metamorphosed rim allowed the glacial overdeepening of the Loch Doon Valley as ice moved northwards. Local ice erosion and frost shattering also left rugged peaks, cliffs and jagged ridgelines in the area.
- 2.7. The Southern Upland Boundary Fault passes to the north of Loch Doon, separating, as the name suggests, high plateaux and hills to the south and lower undulating landforms to the north. The Southern Upland Fault Line is defined by a number of distinct topographic features, including the dramatic clefts of Glen App, Glen Dunnack, the upper section of Glen Tig, Glen Muck and the Howe of Laggan; and the hill ridges of Penderry Hill, Carlock Hill, Milljoan Hill and Benevaird, and from Greensides to Pinbreck Hill. These features establish a strong visual axis across the country.
- 2.8. Dramatic evidence of glacial erosion can be found in proximity to the Southern Upland Boundary Fault where glacier ice has eroded corries and 'U' shaped valleys. The Nick of the Balloch and the corries between Glengap, Haggis and Rowantree Hills are fine examples of this geomorphological feature.
- 2.9. To the north of the Southern Upland Boundary Fault, the area was subject to widespread parallel faulting and volcanic activity, which further complicated geological formations. However, the general patterns follow a south-west orientation parallel to the main faults. The Stinchar Valley Fault follows this orientation and provides a pronounced geological boundary between Ordovician greywackes, siltstones and mudstones of the Tappins Group to the north, and the Ordovician greywackes with thin siltstones and shales to the south. This fault determines the alignment of the Stinchar Valley and the characteristics of its side slopes.
- 2.10. Volcanic activity in southern Ayrshire, as elsewhere in the region, has created a number of distinct topographic features determined by their resistance to denudation. The island of Ailsa Craig and the distinctive conical hills Knockdolian and Loudoun Hill in East Ayrshire are the remains of volcanic plugs. The combination of intrusive and extrusive igneous rocks between Ballantrae and Girvan has also determined the presence of craggy coastal uplands with steep cliff or raised beach bluff slopes.
- 2.11. The majority of Ayrshire is within the western region of the Midland Valley of Scotland. The latter has formed a depository for sedimentary rocks since early Palaeozoic times. Subsequent folding, faulting and igneous activity within the Midland Valley created a complex geological pattern of synclines and eroded anticlines with local intrusions and extrusive coverings of igneous rocks. Generally, the oldest rocks within the Midland Valley are Devonian Old Red Sandstones which were covered by carboniferous rocks including Limestones, Millstone Grits, Coal and Barren Measures; and by Permian New Red Sandstones. The latter is the youngest rock formation found in Ayrshire around Mauchline (in the centre of the Ayrshire Basin).

89	Permian & Triassic sandstones, undifferentiated, including "Bunter & Keuper"
85	Permian basal breccias, sandstones & mudstones
84	Westphalian & ?Stephanian, undivided, of "Barren Red" lithology (England only)
82-3	Westphalian ("Coal Measures")
81	Namurian ("Millstone Grit Series")
80	Tournaisian & Viséan ("Carboniferous Limestone Series")
79	Basal Conglomerate (including possible Devonian)
78	Upper Old Red Sandstone
77	Middle Old Red Sandstone
75	Lower Old Red Sandstone, including Downtonian
74	Ludlow
73	Wenlock
72	Llandovery
70-1	Ashgill & Caradoc
68	Llanvirn & Arenig
53	Basalt & spilite
50	Andesitic & basaltic lavas & tuffs, undifferentiated



44	Andesitic lava & tuff, undifferentiated
43	Basaltic tuff
42	Basalt, spilite, hyaloclastitic & related tuffs
38	Agglomerate in neck
37	Rhyolite, trachyte, felsite, evans & allied types
35	Porphyrite, lamprophyre & allied types
34	Basalt, dolerite, camptonite & allied types
33	Granite, syenite, granophyre & allied types
32	Diorite & allied intermediate types
31	Gabbro & allied types
19	Ultrabasic rock
	Quartz-mica-schist, grit, slate & phyllite (Upper Dalradian)

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## Geology

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Figure 1

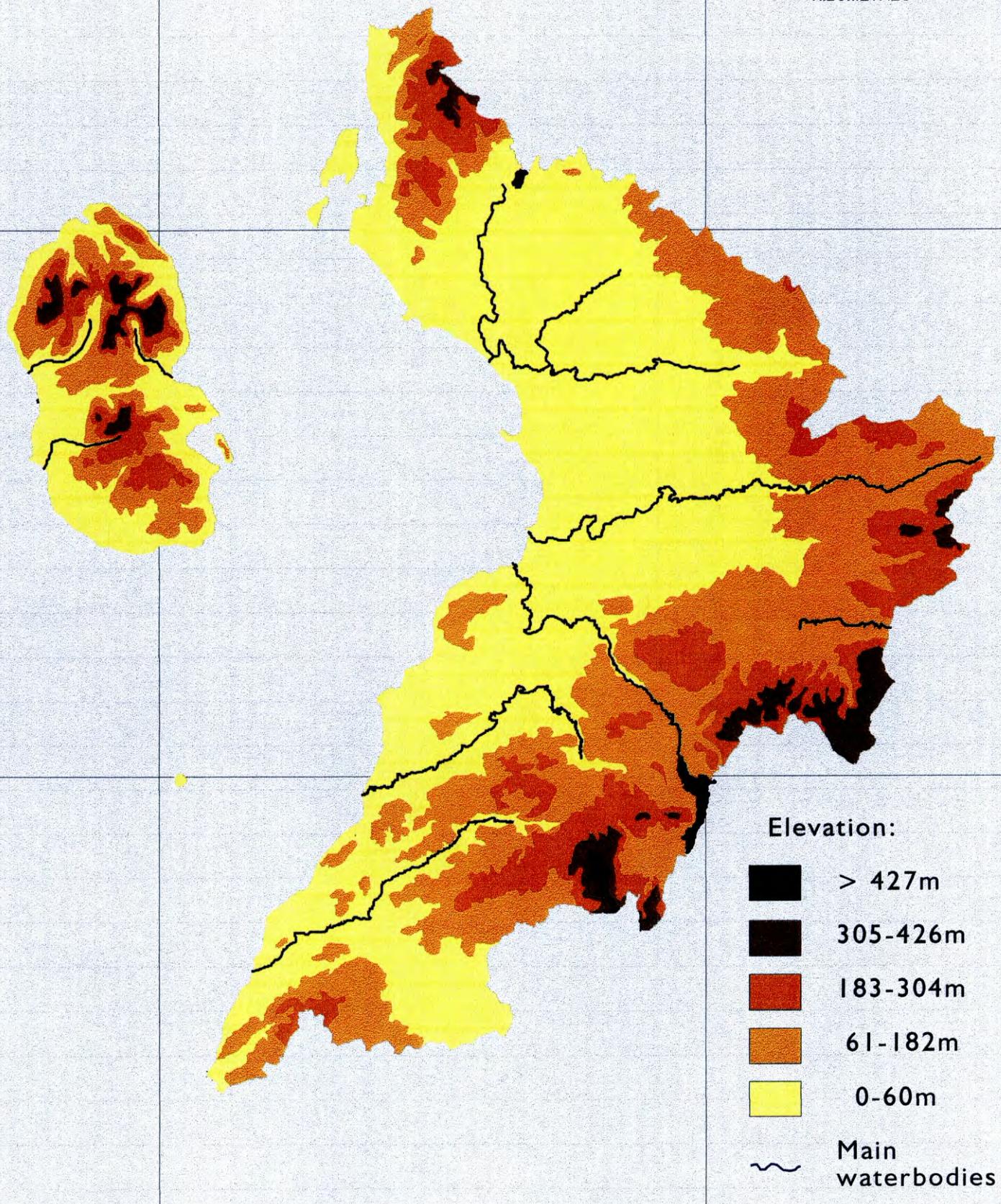


- 2.12. The western region of the Midland Valley comprises two carboniferous basins: the Ayrshire and Lanarkshire Basins. These basins represent two major downfolds separated by a ridge of hills which are the remnants of an eroded upfold capped by resistant carboniferous lavas (basalt and spilite). This ridge of hills and heathy plateaux extends south east from the Wemyss Bay - Gourock headland between Darvel and Strathaven, from where it becomes disrupted by parallel faulting close to the Southern Upland Boundary Fault. Old Red Sandstone underlies the lava cap but re-emerges in the south as a discontinuous band running roughly parallel with the Southern Upland Boundary Fault. The basalt covered ridge of hills effectively defines Ayrshire's north eastern and eastern rim and determines that the general incline of the region is towards the western seaboard. The disrupted Old Red Sandstone hills in the south serve to close the basin and create its roughly horse-shoe shape.
- 2.13. The drainage patterns reflect these orientations with the main rivers converging towards the low coastline between Saltcoats and Ayr. These include the River Garnock and tributaries, Annick Water, Fenwick Water, the River Irvine and the River Ayr. In the south of Ayrshire, river valley systems have been more significantly affected by faulting, as discussed in paragraph 2.9, and by glaciation. The upper reaches of the River Doon and the Water of Girvan valleys in particular, have been carved by ice from the Southern Uplands.
- 2.14. Several of the above rivers show evidence of overdeepening as a result of isostatic adjustment after the release of ice pressure in post-glacial times. The incised lower valleys of the Rivers Ayr, Irvine and Doon best illustrate this effect. Ayrshire's raised-beach coastline is also testament to the relative changes in land and sea levels. Where the hinterland is composed of higher, more resistant rocks, the once towering sea cliffs now rise as steep bluff slopes behind raised beach terraces of varying widths. These raised beaches have provided valuable light soils for cultivation and enabled the construction of coastal towns, villages and communication routes.
- 2.15. A large proportion of central Ayrshire is underlain by coal measures (Ayrshire Coalfield) which contain productive coal seams and ironstones at various depths. This combination of raw materials, the accessibility of the area and the presence of plentiful water supplies, stimulated the development of the iron industry in Ayrshire. The region boasted 48 blast furnaces at one point in the 19th century, with heavy concentrations along the River Garnock Valley, and the upper reaches of the River Ayr and River Doon Valleys.
- 2.16. The shallowest (most accessible) coals are around the edge of the Ayrshire Basin, bordering and underlying the eastern hill range. These were easily extracted and quickly worked out by stoop and room methods in the 19th and early 20th centuries. This activity has left a legacy of bings, mining villages, disused railtracks and derelict structures. The current practice of open-cast mining makes these shallow coals (including previously worked ones) of interest to mining companies, hence the current open-cast operations and proposals in the area.
- 2.17. Ayrshire's deep coals are located in the centre of the basin to the east of Ayr, c.600m beneath thick layers of Barren Red Measures, Permian Sandstones and lavas. These are harder to extract and as a result they remained undisturbed until later deep mining technology made their extraction viable.

- 2.18. The newest rocks in the centre of the basin are Permian New Red Sandstone found to the west and south west of Mauchline, covering the low plateau known as Kyle. As in Dumfries and Galloway, this deep red freestone is prized for its building qualities. Its consistent durability yet ease of cutting and dressing, coupled with its extraordinary colour, has encouraged its local use for building and its quarrying for export from Ayrshire ports. The former Ballochmyle Quarry at Mauchline was once the main commercial quarry. Smaller local quarries also provided freestone for local construction. The distinctive red sandstone was used widely throughout Ayrshire and is a dominant characteristic of many towns.
- 2.19. Generally throughout the region, local stone has been used for vernacular building and construction methods tailored accordingly. Locally, Old Red Sandstones, certain Millstone Grits and Limestones have provided good masonry. The harder basalts and dolerites, however, have generally been used for rubble work.
- 2.20. Vulcanicity throughout the Midland Valley caused the introduction of intrusive and extrusive igneous rocks including granites, basalts, dolerites and rhyolites. As described in paragraph 2.12, the eastern rim of the Ayrshire Basin was capped by carboniferous basalt and spilite; the basin itself was mostly affected by local intrusions of basalt and dolerite. The low coastline is punctuated by dolerite sills which form the headlands of Prestwick, Troon and Saltcoats. Inland, these igneous rocks form locally prominent hills such as those between Troon and Dundonald, and the hills north of Dalmellington and Waterside (e.g. Benquahat Hill).
- 2.21. The most dramatic and complex igneous features are, however, found in Arran where the remains of a massive granite pluton dominates the northern half of the island (and the Firth of Clyde). The Arran Granite is the second largest Tertiary Granite outcrop in the UK. It comprises two types of granite; its outer part is coarse grained and extremely resistant to erosion, its centre is softer fine grained granite. The result has been differential erosion leaving sharper higher peaks around the east and west margins (e.g. Cir Mhor and Beinn Bharrain) with a low central trough (Glen Iorsa) flanked by lower rounded mountains.
- 2.22. The present rugged character of this granite massif is largely due to the processes of glaciation. Arran was covered by ice sheets on several occasions and was a local centre for ice movement. This resulted in the glacial carving of softer rocks, existing valleys and lines of weakness, accompanied by the frost shattering of high exposed rocks and the deposition of eroded material in lower areas. The products of glaciation include 'U' shaped valleys, hanging side valleys, corries, corrie ridges and the horns of summits. Glacial and inter glacial deposition left moraines on the lower ground, particularly in the main glens where they are local features or provide areas capable of cultivation.
- 2.23. The Arran Granite intruded within the Dalradian schists to the north of the Highland Boundary Fault. In so doing, it caused a south eastern deformation of the fault line into an arc around the northern part of Arran. The granite intrusion is, therefore, fringed by Dalradian schists to the north, south and west, but also has a mixture of displaced sedimentary rocks to its north and east. This narrow coastal margin has been influenced by the isostatic adjustment of Arran, whereby raised beaches were formed over the underlying metamorphic and sedimentary rocks.



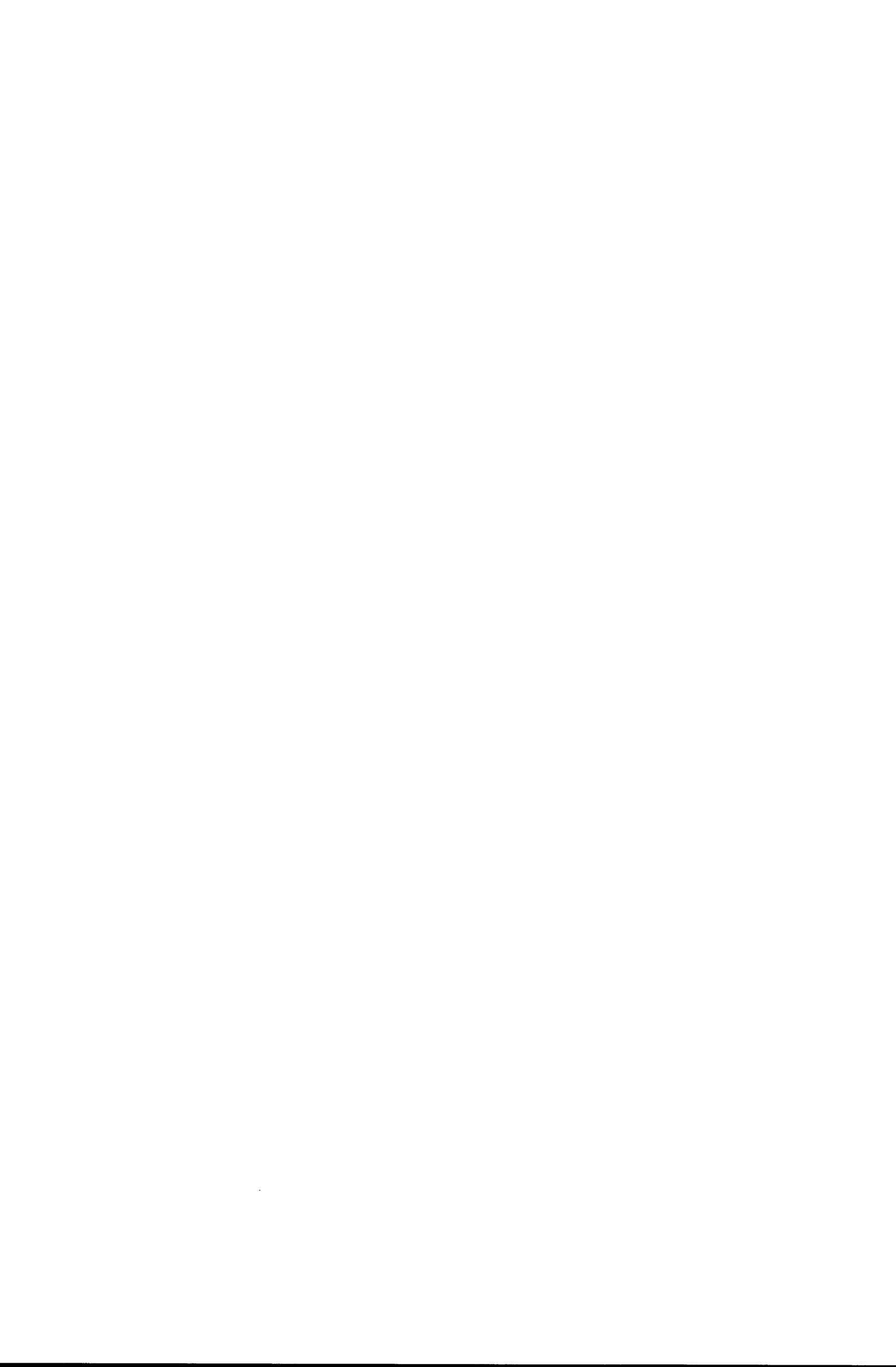
1 10 20  
KILOMETRES



## Topography

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**Figure 2**



- 2.24. The raised beaches provide a narrow but important fringe of habitable land around the northern coast of Arran. Above this fringe, the slopes generally rise steeply and have thin acid soils only capable of supporting rough grazing and some forestry. The agricultural limitations of northern Arran have determined that few widespread agricultural improvements were implemented during the 18th/19th centuries and consequently, the remnants of ancient patterns of settlement and land tenure can still be seen.
- 2.25. The north eastern fringe of Arran comprises the displaced sedimentary rocks below the Highland Boundary Fault line (which is defined by the North Glen Sannox and Glen Chalmadale valleys). These include Carboniferous and Permian rocks which are tilted to form a rampart of cliffs known as the Cock of Arran. These contain coal measures which were mined for a period to provide local fuel for the island.
- 2.26. The southern half of Arran is an undulating plateau c.500m AOD, dipping generally towards the south west and to its shores. It is underlain by predominantly New Red Sandstone with numerous igneous intrusions which create local ruggedness. Igneous sills from the Tertiary period have left sheets of resistant rock between beds of sedimentary rocks. Their relative resistance to denudation has left cliffs, scarps and terraces. These include the cliffs at Drumadoon Point, Brown Head and Bennan Head and the scarps in south east Arran at Cnoc na Garbad, the waterfall steps of Glenashdale and Auchenhew Hill. Arran contains many other complex geological features which contribute to the local character, these include a 'ring complex' in the centre of Arran where igneous intrusions within a 'caldera' remain as irregular peaks around Glen Craigag, e.g. Ard Bheinn and Creag Dubh. Igneous dykes (vertical sheets of granite and gabbro) are also visible along the south shore of Arran, and Holy Island represents part of a 'ring dyke' of riebeckite-trachyte which itself is part of a cone sheet complex centred on Lamlash Bay.
- 2.27. Raised beaches extend around the southern half of Arran and support the most productive farming. Soils on the New Red Sandstones are also productive, particularly in the areas of lower gentle relief. The igneous rocks, on the other hand, have generally thin, often rocky acid soils which support moorland habitats. The more extensive cultivable soils in southern Arran encouraged large scale agricultural improvements during the 18th and 19th centuries. As a result, there is a greater regularity of field and settlement patterns in southern Arran, which has replaced the ancient patterns still visible in the north of the island.

## HUMAN INFLUENCES

- 2.28. The landscapes of Britain have been inhabited since soon after the retreat of the last ice sheets around 10,000 years ago. Humans have, therefore, utilised and manipulated the landscape and its physical resources for several millennia. The results of this activity are now essential characteristics of the landscape. This part of the chapter seeks to summarise how humans have influenced the physical landscape of Ayrshire.

### Mesolithic Period (7,000-4,000BC)

- 2.29. In Mesolithic times, it is believed that the majority of Ayrshire was covered in woodland and scrub communities, with areas of open moor and grassland on higher areas. Into this landscape arrived migrations of people travelling up the west coast by the use of small craft. These nomadic people were reliant on fishing and hunting and established only temporary settlements on the raised beaches, leaving relics in the form of small flint tools and middens as at the mouth of the Stinchar near Ballantrae and at Shewalton and Ardeer. There is little evidence of Mesolithic settlement inland, although it is likely that hunting expeditions took place. The absence of burial sites from this period suggests that the Mesolithic culture in Ayrshire was relatively impoverished.

### Neolithic Period (4,000-2,500BC)

- 2.30. Around 5,000 years ago, migrations of people from a more sophisticated farming society moved into Scotland. These Neolithic people grew crops and kept domesticated animals. They were also more accomplished craftsmen, capable of pot making, weaving and the creation of stone implements by grinding instead of chipping. They established settlements in coastal areas and lowland areas accessible from the coast. In so doing, they cleared areas of woodland to allow the cultivation of crops. Animals were also herded on upland areas where open grassland was more extensive. The Neolithic people lived in tribal groups with a high level of social cohesion, as evidenced by their burial sites and ritual monuments which were built in stone and consequently remain as features in today's landscape.
- 2.31. Most Neolithic burial sites were often located on hill slopes close to the coast and slightly remote from the dwelling places. The resultant monuments include chambered cairns, stone circles and standing stones. Burial sites in mainland Ayrshire include: Ballmulloch and Stravarren near Ballantrae; Haylie, above Largs; and Cuff Hill, near Beith. The largest concentration of prehistoric monuments in Ayrshire (and one of the most significant in Scotland) is, however, in Arran, where numerous outstanding chambered cairns can be seen, along with round cairns, stone circles, standing stones and monuments from the later Bronze and Iron Ages. Little evidence remains, however, of Neolithic dwellings which are believed to have been of more temporary timber construction.

## Bronze Age (2,500-700BC)

- 2.32. Bronze Age immigrants are believed to have arrived in Ayrshire at two periods: c.1,400BC and 800BC. These represented sizeable influxes of people who have left many relics in the form of burial sites, standing stones, stone circles and a variety of weapons, pottery, jewellery and implements. Evidence suggests that they integrated with the earlier inhabitants, sharing technologies and even some burial places. During this period agriculture became more established, replacing nomadic pastoralism. Woodland clearance accelerated allowing more extensive cultivation on the lower ground, on raised beaches, along valleys and along the forest edges. The pasturing of cattle on the uplands was also more extensive.
- 2.33. Society became more political and settlements more permanent. Consequently, hut circles and associated field systems have been found in areas least disturbed by agricultural improvements of later centuries. The most significant site of Bronze Age relics is at Machrie Moor on the west coast of Arran, where a concentration of dwellings, ritual and funerary monuments from the Neolithic and Bronze Ages are evocative features of the landscape. Bronze Age burial practice generally differed from Neolithic practice, and changed throughout the Bronze Age. Burials were typically in cists beneath round cairns. Late Bronze Age burials frequently involved cremation, and the burial of urns containing bones beneath cairns or within urnfield cemeteries. It was common for old burial and ritual sites to be reused over many generations, hence the localised mixture of ritual practices.

## Iron Age (700BC-500AD)

- 2.34. Several factors changed the landscape of Ayrshire during the Iron Age. Firstly, there was a significant deterioration in the climate which reduced the area of productive land and caused populations to become more warlike to enable the defence or forcible acquisition of good land. The introduction of iron technology from Europe, possibly combined with the immigration of more military cultures, enabled the production of more effective weapons and tools. This facilitated the felling of extensive lowland forests in order to increase areas for cultivation and stock rearing. The introduction of mould-board ploughs also allowed the cultivation of heavier soils, thereby increasing the scope for agriculture throughout inland Ayrshire.
- 2.35. Political control became a major feature of Iron Age society. Extensive defences were established under a warlike aristocracy. These included many forts and smaller fortlets or 'duns' which were built on commanding hilltop sites throughout the region. Several vitrified forts, whose walls were fused together by burning, are found in Ayrshire, these are at Largs (Knockhill), West Kilbride (Auldhill), Kirkoswald (Dowhill) and Maybole (Kildon). Duns were more numerous, they were found at West Kilbride, Dalry, Fenwick, Dundonald, Craigie and Maybole. Another form of defensive habitation found in Ayrshire is the 'crannog', an artificial island dwelling constructed in shallow lochs and connected to the shore by a causeway. These generally appear as small overgrown islands or are submerged irregularities. In Ayrshire, they are found at Tarbolton (Lochlea) and Maybole (Lochspouts).

- 2.36. Farmsteads established during the Iron Age became the main centres of habitation and it was common for farms to be developed and redeveloped over time on the same site. Many of today's farms are located on sites of Iron Age (or possibly earlier) origin. The typical low hilltop location of many Ayrshire farms is a legacy of this period.

### **Roman Occupation (c.83AD-215AD)**

- 2.37. There is little evidence of Roman occupation within Ayrshire as a whole, although trade with the Romans is evidenced by finds in Iron Age sites. The most significant Roman development was the fort at the top of the Irvine Valley opposite Loudoun Hill. This site was occupied and abandoned on several occasions during the Flavian and Antonine occupations of southern Scotland. It is probable that roads were also constructed into Ayrshire from the east, but no conclusive evidence remains.

### **Dark Ages (c.200AD-1,000AD)**

- 2.38. Few records and little archaeological evidence remains to provide a clear picture of developments during this period. It was a time of continued immigrations, political changes and warfare between tribal groups. The Ayrshire Britons were subject to invasions from Teutonic Angles from the east, and from Scots (Goidelic Celts) from Ireland.
- 2.39. The Angles imported superior farming techniques and concentrated their colonisation in the lowlands and valleys of Ayrshire where farmland was most productive. This process has left a legacy of Anglian placenames throughout the Scottish Borders, Galloway and Ayrshire. In Ayrshire these co-exist with Celtic names, particularly in higher areas. Ultimately, the local Damnonii tribal group merged with the British Kingdom of Strathclyde and incorporated Anglian immigrants to extend the Kingdom into Cumbria.
- 2.40. Christianity was introduced to Ayrshire during the 5th century. Initially, missionaries entered the region from Ninian's church at Whithorn in Galloway. Religious cells were established as reflected in the 'Kil-' prefix of certain (but not all) placenames, e.g. Kilwinning, Kilbirnie, Kilmarnock, etc. More positive proof of religious activity are the Celtic crosses installed between the 5th and 10th centuries at Ballantrae, Girvan, Dailly, Colmonell, Maybole, Alloway and Kilbirnie.

### **Medieval Period (1,000AD-1,600AD)**

- 2.41. The Medieval period saw the establishment of a Scottish monarchy and the development of a feudal society in lowland Scotland, which copied many aspects of the Norman administration of England, and encouraged the immigration of Norman barons and churchmen into Scotland.
- 2.42. Ayrshire initially comprised four districts, each administered by feudal lords or the Crown. These were Cuninghame, Kyle Stewart, King's Kyle and Carrick. The main rivers of Ayrshire constituted the boundaries of each district, i.e. the Irvine, the Ayr, and the Doon. The feudal lords established bailiery courts and religious centres in each district. In Cuninghame, the bailiery court was established at Irvine and Kilwinning Abbey developed for the Tyronensian Order of monks.

In Kyle Stewart, the bailey court was established at Prestwick and the Cistercian Order was granted a castle and land around Mauchline. In King's Kyle, a Royal Castle and St. John's church were built in Ayr. In Carrick, Turnberry was made the feudal centre and Crossraguel Abbey was constructed for the Cluniac Order.

- 2.43. The feudal overlords granted lands and delegated functions to lesser lords and their vassals. The lands granted form the basis of many estates in Ayrshire and at their centre, control was exercised from castles. Whilst some Iron Age forts were adapted, most castles of the early Medieval period adopted Norman designs, i.e. motte and bailey castles which were crude and easily erected. This type of castle was constructed at Dalry, Beith, Largs, Dalmellington, Tarbolton, Ochiltree and Loudoun.
- 2.44. By the 12th century, stone was used more widely in castle construction and older timber structures were reinforced or replaced by stone. The first major stone castles were built for the King and important barons, as at Loch Doon Castle and Dundonald Castle. By the 14th century, stone built castles and towerhouses were the usual residence for local lords. In the following centuries, these residencies became less austere; architectural ornamentation was added, interiors were decorated and glazed windows were used.
- 2.45. The majority of the Medieval population was involved in farming (under a feudal tenancy arrangement). A typical farm unit comprised a group of dwellings for several families with gardens or kailyards. Nearby was the 'infield', an area intensively farmed on a run-rig system. Beyond the 'infield' was the 'outfield', which was cultivated but used less intensively with fallow periods. Oats, barley, peas and beans were typically grown in these fields. In the surrounding 'common' areas of rough pasture, cattle were herded or tethered.
- 2.46. The above system, largely based on Iron Age farming patterns, continued until the agricultural revolution of the 18th century. It was responsible for extending woodland clearance throughout the region until Ayrshire was largely devoid of mature woodlands. The various religious orders were responsible for large tracts of land into which new agricultural techniques and crafts were introduced. Sheep herding and woollen textile manufacture were typical influences. The introduction of Protestantism in the 16th century saw the despoilation of previous religious centres such as Kilwinning, Fail and Crossraguel. From the 17th century onwards, new Presbyterian chapels were constructed throughout Ayrshire and parish ministries established.

## 18th and 19th Centuries

- 2.47. By 1700, Ayrshire's population had risen gradually to c.50,000. This comprised mostly country dwellers based in farming communities or 'farm touns' described in paragraph 2.45. After the Act of the Union in 1707, an economic revolution began which caused subsistence farming to be replaced by commercial farming, and promoted mineral exploitation and manufacturing industries. This revolution was fuelled by trading opportunities with the Americas and with England.
- 2.48. Manufacturing expanded rapidly in Ayrshire, initially based on textiles, particularly woollen goods, cotton and linen. Weaving centres were established at Kilmarnock and Stewarton, flax and linen was produced at Beith. The growth of the cotton industry then saw the development of the massive Catrine Works and workers' accommodation at Ballochmyle.

Many more cotton spinning works were then developed in Beith, Dalry, Kilwinning, Irvine, Kilmarnock, Dundonald and Monkton. Linen, silk, muslin and lace manufacturing also developed as specialist markets in the Garnock and Irvine Valleys. These developments caused the rapid expansion of towns and establishment of new industrial communities.

- 2.49. The above developments were accompanied by a transformation of Ayrshire's landscape as landowners sought to provide raw materials for the available markets. This process of agricultural improvements involved:
- the clearance of the old run-rig/infield and outfield system;
  - the regrouping of many farmsteads and the development of new farm units;
  - the renovation of farmland through deep ploughing, draining, liming and manuring;
  - the enclosure of farms and regular subdivision into fields using hawthorn (and some beech) hedges and stone dykes in the uplands;
  - the introduction of tree lines, avenues and shelterbelts;
  - the introduction of a rotation system, i.e. the Fairlie rotation which takes 5/6 years and involves two thirds grass and one third crops.
- 2.50. In addition to the above measures, landowners planted woodlands around their estates, particularly in the vicinity of their mansions as part of designed landscapes. Notable early improvers in Ayrshire were Alexander, 10th Earl of Eglinton and John, 4th Earl of Loudoun, who undertook extensive improvements during the mid 18th century.
- 2.51. The farm landscape of today is largely the product of these agricultural improvements. They were, however, not all-inclusive, and in many marginal areas the improvements were modest, leaving previous agricultural patterns legible in the landscape. In the north of Arran the absence of significant agricultural replanning has preserved the ancient 'clachan' farming patterns in certain areas.
- 2.52. Ayrshire's coalfield was initially exploited by small scale surface mining to provide fuel for lime burning, for fertiliser and for saltpanning. This market grew as industry developed and agricultural improvements demanded more fertiliser. Large coal mines were developed near Kilmarnock, Cumnock, Dalmellington and New Cumnock where the coal is at shallow depth. The presence of iron ore within the coal measures promoted the development of Ayrshire's iron industry towards the end of the 18th century. Muirkirk was the first iron centre followed by centres at Cessnock (Galston), Blair (Dalry), Glengarnock (Kilbirnie), Afton (New Cumnock), Lugar (Auchinleck), Portland (Hurlford), Waterside (Dalmellington), Eglinton (Kilwinning) and Ardeer (Stevenston). By 1869, there were 48 blast furnaces in Ayrshire served by a network of railways linking industrial centres and Ayrshire ports. Significant areas of former farmland were disturbed and developed for heavy industry. Coal bings, mine structures, furnaces, process areas, workers' dwellings and communication lines were introduced into the rural landscapes as north Ayrshire became heavily industrialised. By 1878, Ayrshire had 104 collieries and 42 blast furnaces, in addition it had a fireclay and coal tar industry and was supported by numerous engineering works.

- 2.53. Improvements in transportation facilitated many developments by providing access to markets and to manufacturing/processing centres. In the early 18th century, local road improvements were undertaken by landlords. These were extended by the Ayrshire Turnpike Acts of 1767 and 1774 which led to a network of good roads. Industrialisation led to railway and port developments during the 19th century which improved access to Glasgow and Ireland via Stranraer and Dumfries. By the end of the 19th century, Ayrshire's population had become predominantly urban based and had grown to c.250,000.

## 20th Century Developments

- 2.54. The 20th century has seen the dramatic decline of Ayrshire's heavy industries. The North Ayrshire Coalfield was 'worked-out' by conventional mining methods, resulting in the closure of 80 pits between 1900 and 1930. In the same period, 54 pits closed in central Ayrshire. The National Coal Board, established in 1947, concentrated its efforts in the large, deep mines of central Ayrshire until open-cast methods allowed the extraction of previously unviable shallow coals. Open-cast coal mining has, therefore, increased over the last 20 years, resulting in significant local landscape changes.
- 2.55. All of Ayrshire's ironworks had closed by the 1920s, leaving only Glengarnock Steelworks and a number of foundries to continue for a few more decades. Engineering industries similarly declined, although a number of textiles industries do continue. The decline of these industries has removed the raison d'être of several communities and has left some incongruous urban housing schemes, once related to the coal/iron industries, in a countryside setting.
- 2.56. Farming became more specialised during the 20th century, particularly in dairying, potatoes and sheep farming, and more land has been given over to grazing. The use of fertilisers has increased and the greater numbers of stock require the importation of feedstuffs, silage making and longer rotations under grass. This has introduced silage towers as common features in the landscape and has generally diminished the diversity of the agricultural scene. Dairying operations have changed; cheese is no longer produced on farms and consequently, traditional buildings have become redundant and the keeping of small numbers of dairy fed pigs and poultry is rare. The latter are now typically farmed in a concentrated fashion as pig farms or with broiler houses.
- 2.57. This century has also seen the break up of most great estates, followed by the decline of mansion houses and their designed landscapes, e.g. Loudoun Castle and Eglinton Castle. Several mansion houses have been converted to new uses as educational establishments, hospitals or hotels, a process that has generally involved associated developments, changes to or loss of the designed landscapes. The loss of estate control through the sale of land to several former tenants has also allowed differences in management approach to become evident, e.g. upkeep of hedgerows.
- 2.58. In 1919, the Forestry Commission was established with a remit to build up the UK's strategic reserves of timber. The Forestry Commission purchased large areas of uplands and estate forests and pursued a policy of maximum timber production. The most extensive forests were developed in the Southern Uplands extending into Galloway. These include the Glentrool, Loch Doon and Carsphairn Forests. Forestry in Ayrshire has increased steadily during this century, latterly by private investment in the foothills and moorland plateaux further north.

- 2.59. Changes in the Forestry Commission's policy objectives throughout this century have seen a shift from highly commercial 'blanket' afforestation to multi-function forests which accommodate recreation, and respect the natural and built heritage resources of an area. These shifts have resulted in more sympathetic forest designs which employ greater proportions of open space, respond to topography and contain greater variety of species, particularly broadleaves.
- 2.60. Increased car ownership and individual mobility since the War was instrumental in the closure of Ayrshire's railways in 1963 and created the demand for a road building/improvement programme. Major works have been undertaken to the A77, including dualling and rerouting. Most of Ayrshire's main roads have also been improved. The mobility provided by the car has created commuter demands for development in Ayrshire's countryside and has helped to sustain settlements where local employment opportunities have declined. The main settlements have continued to grow, thereby increasing demands for development along the Ayrshire coast, particularly between Ayr and Ardrossan.

### **3. KEY FEATURES OF THE AYRSHIRE LANDSCAPE**

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#### **INTRODUCTION**

- 3.1. The processes of landscape evolution described in Chapter 2 have created a wide variety of features which are integral to the character of Ayrshire's landscape. This chapter seeks to identify the key features and describe their contribution to landscape character.
- 3.2. The features are described under the following broad categories:
  - topographic features;
  - natural heritage features;
  - trees, woodlands and hedgerows;
  - archaeological features;
  - built heritage and industrial features.

#### **Topographic Features**

- 3.3. Ayrshire is predominantly a lowland region lacking the large scale rugged grandeur of the Northern Highlands. It does, nevertheless, have local areas and features of strong relief which provide dramatic and scenic contrasts to gentler topography of the surrounding areas. The smallest of these are the distinctive remains of volcanic plugs which constitute Loudoun Hill, Ailsa Craig, the Heads of Ayr and Knockdolian.
- 3.4. On a grander scale are the rugged glaciated peaks of Arran and the Loch Doon Mountains, with their corries, 'U' shaped valleys, hanging valleys and frost shattered ridges. Less rugged, but nevertheless powerful geomorphological features, are the smooth glacially carved valleys of the Southern Uplands as typified by the Nick of the Balloch.
- 3.5. Ayrshire's coastline of raised beaches is equally distinctive and impressive, particularly where the former cliffs rise to great height behind the flat fertile terrace of the raised beach.

## Natural Heritage Features

- 3.6. Ayrshire and Arran encompass coastal, lowland, mid-altitude and upland landscapes which, despite the predominance of cultivated land, support a variety of flora and fauna. In addition, the complex geology of this region provides a broad range of geological and geomorphological interest. These are reflected in the designation of over 70 Sites of Special Scientific Interest (SSSI), half of which are related to geological interest. These SSSIs include one National Nature Reserve (NNR) at Glen Diomhan (North Arran), one Special Protection Area (SPA): Ailsa Craig, and two proposed Special Areas of Conservation (SAC): Merrick Kells and Cockinhead Moss. In addition, the local authorities have identified many sites of local wildlife importance (i.e. Listed Wildlife Sites). These designated and listed sites represent only a small percentage of Ayrshire which contains the most valuable and sensitive recorded resources. There are many other areas of local value for wildlife and several large areas whose general value for natural heritage is broadly recognised. The following paragraphs seek to summarise the key natural heritage attributes of Ayrshire.

### ***Upland/Moorland Habitats***

- 3.7. The highest mountains of Ayrshire are associated with the granite and metamorphosed rocks at Loch Doon and in North Arran. These are encompassed within the region's largest SSSIs (Merrick Kells and North Arran) and support a diversity of upland communities more typical of mountains further north. They contain combinations of dry heath and bilberry on upper slopes, with mosaics of fescues and mosses. Mires are extensive at lower altitudes dominated by purple moor-grass, heather deergrass and hare's tail cottongrass. The variety of soils also supports areas of woodland (typically birch, rowan, oak and ash) but Arran also has its endemic whitebeams: *Sorbus arranensis* and *Sorbus pseudofenica*. These combine with the grasslands and brackens to create a rich mosaic capable of supporting a variety of insects, animals and birds (including golden plovers, dunlin, hen harrier, raven, peregrine and golden eagle). When viewed from a distance, this creates patterns of ochres, browns, greens and oranges, broken occasionally by rock outcrops, which change seasonally into flushes of green, pink heather blossom, russets of bracken and deergrass and whites of snow.

### ***Moorland and Mosses***

- 3.8. Moorland also covers significant areas of mid-altitude hills and plateaux in Ayrshire. This generally comprises a mixture of wet and dry heaths, peatland mosses, fens and mires, with local variations in response to the changes in geology and hydrology. Several 'mosses' remain as isolated features within pastoral farmland, where local land improvements have reduced their previous extent. These isolated raised bogs and mires are locally important for wildlife and provide landscape diversity. A number of these have consequently been designated as SSSIs (e.g. Bankhead Moss, Beith; Barlosh Moss; Cockinhead Moss; and Dykeneuk Moss). The larger areas of plateau moorlands and mosses also contrast with the adjacent cultivated/improved grasslands and provide valuable tracts of undeveloped land as habitats for a broad range of insect, animal and bird life.

## Generalised Landcover:

[Black] Moorland Vegetation

[Black] Coniferous Forestry

[Dark Brown] Rough Grassland

[Dark Grey] Lowland Pastoral Agriculture

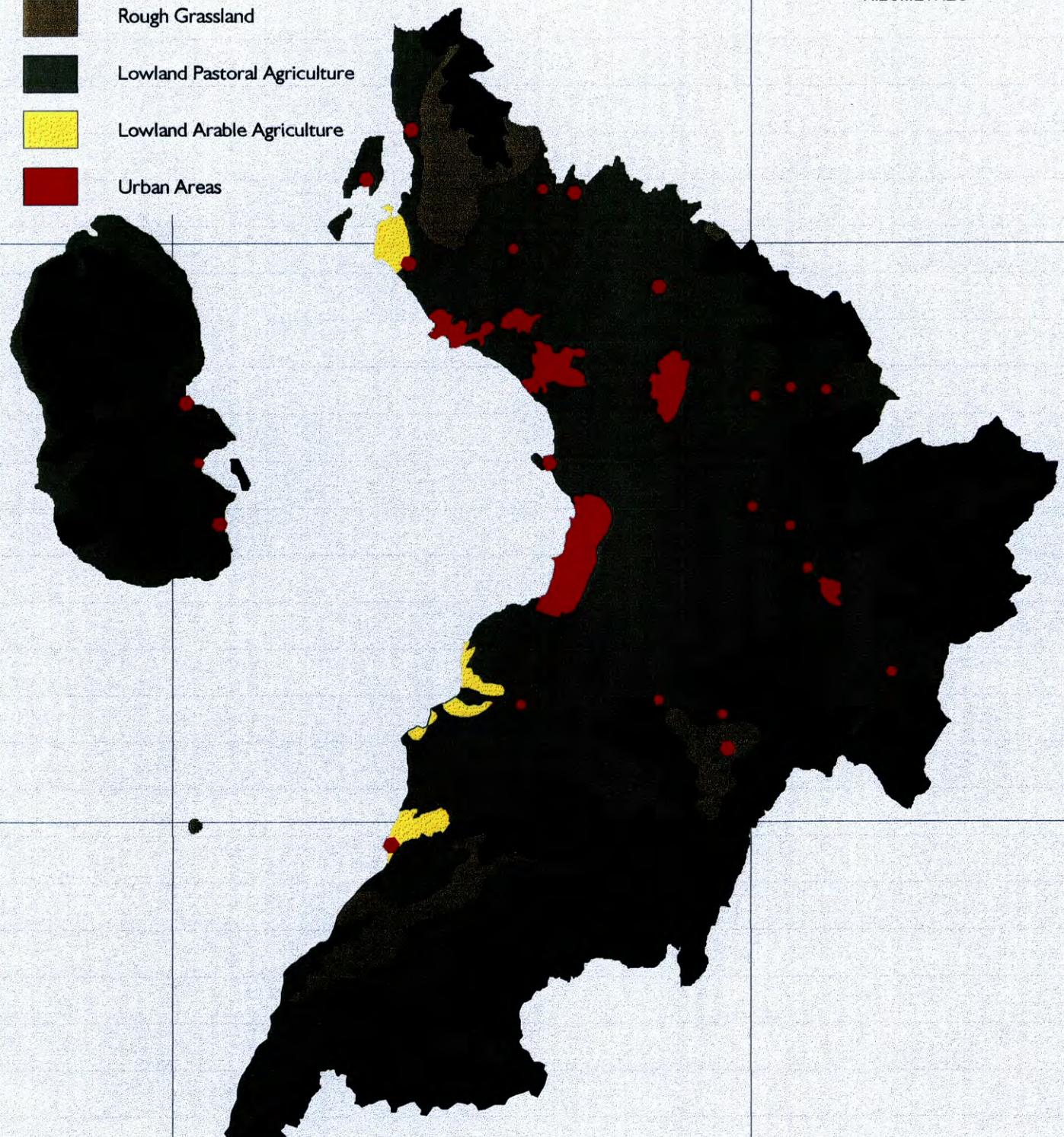
[Yellow] Lowland Arable Agriculture

[Red] Urban Areas



1 10 20

KILOMETRES



**Landcover**

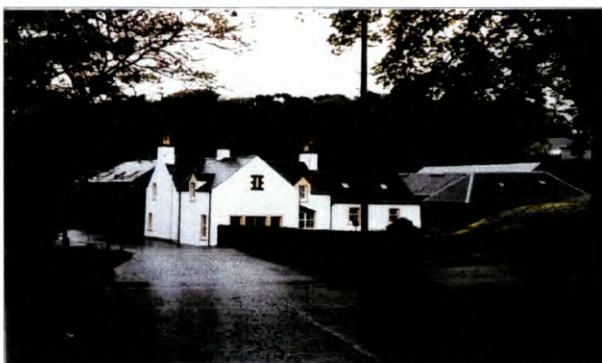
**Figure 3**



## FEATURES OF THE LANDSCAPE



Upland farmsteads, often whitewashed and with slate roofs are compact and located to maximise shelter.



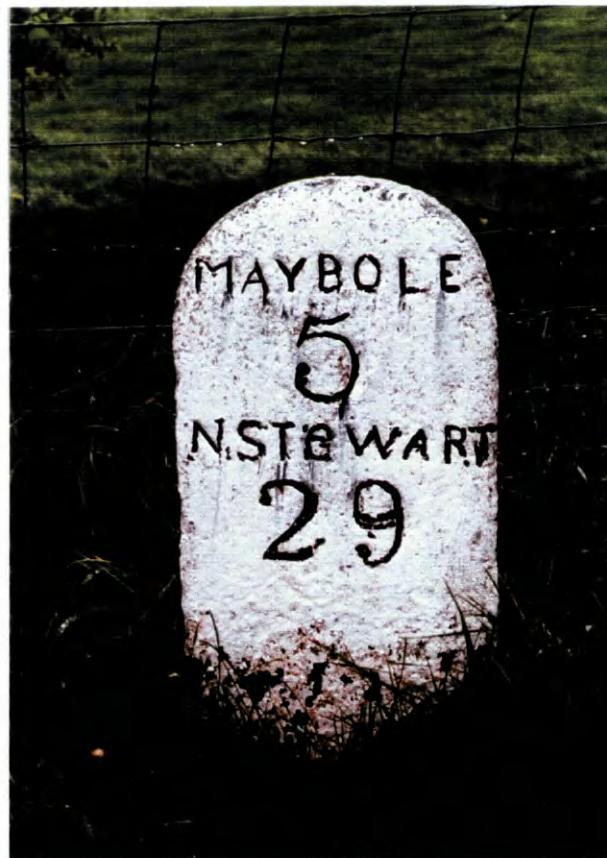
Many lowland farmsteads are larger, focused on a central courtyard. Modern buildings often respect traditional scale and materials.



Drystone dykes are found throughout Ayrshire, but vary in reflection of local geology.



Castles and tower houses guard many historic routes. Here at Craignel near Colmonell in the Stinchar Valley.



Milestones, fingerposts and other features make an important contribution to the finer grain of the Ayrshire landscape.



Parallel rows of simple cottages characterise many settlements, here at Straiton.



Historic settlements such as Sorn in the Ayr Valley exhibit the use of traditional materials and building designs.



### ***Native and Semi-Natural Woodlands***

- 3.9. The great majority of Ayrshire's native woodlands were cleared by past generations to increase areas of cultivation or to provide timber. Only a few protected areas have retained old semi-natural or native woodlands which harbour significant wildlife interest. These are mainly within narrow steep-sided valleys, remote upland fringe areas or are parts of old estate woodlands which have encompassed ancient woodlands, possibly preserved for hunting. The best examples include River Ayr Gorge, Craig Wood of Glen Tig, Ness Glen near Loch Doon, Skelmorlie Glen, Benlister Glen and Dundonald Wood. They contain native and semi-natural woodlands which include oak, ash, elm, alder and birch, with often introduced beech and sycamore.

### ***Grasslands***

- 3.10. A large proportion of Ayrshire's grasslands have been modified by the agricultural processes of improvement and cultivation. These have removed or reduced ecological diversity except in the limited areas excluded from these processes. The most extensive grasslands of nature conservation interest are in the unimproved upland fringe areas or on low igneous hills where the soils support a variety of grassland habitats. These include base rich grasslands, herb rich grasslands, wet and dry grasslands, usually interrupted by flushes and mosaics of heath, fen and mire. In coastal areas, the salt spray also influences the vegetation patterns by lowering the acidity of the soils as at Bennane Head.

### ***Lochs***

- 3.11. Ayrshire lacks large natural lochs (Loch Doon having been artificially enlarged) but has numerous small lochs and reservoirs. These provide open water valued by a wide range of breeding and wintering wildfowl including rare species like red-throated diver. They also have a range of aquatic and marginal vegetation which provides great diversity within concentrated areas. Lochs within Ayrshire may contain emergent reedswamp, and be fringed by mires, fen, carr or marshy grasslands, dependant on altitude, underlying soils and geology. Several of these lochs have been designated SSSIs including Ashgrove Loch, Martnaham Loch, Bogton Loch and Loch Doon. Many other small mire lochs are also included within larger designated areas.

### ***Coastlands***

- 3.12. Ayrshire's extensive coastline has numerous features of nature conservation interest. These are principally its intertidal mudflats, sands and shingles, its sand dunes and dune grasslands, its sea cliffs and former cliff slopes and the transitions of vegetation between these different zones. These features and the broader areas influenced by salt laden winds support a broad range of seabirds and wildfowl, locally distinctive or rare plant communities and insects which in subtle ways all contribute to the local character of the landscape.

## **Trees, Woodlands and Hedgerows**

- 3.13. As described in paragraph 3.9, the majority of Ayrshire's native and semi-natural woodlands are located in the inaccessible and protected environments of steeply sided valleys, remote mountain slopes and old estates. These only represent a small percentage of Ayrshire's total woodland cover and make relatively localised contributions to landscape character. The more extensive tree and woodland features are, therefore, of plantation origin or are part of farm landscapes.

### ***Policy Woodlands***

- 3.14. The woodlands of estates and their designed landscapes surrounding mansion houses and castles are significant features of the Ayrshire landscape, making positive contributions to most of the lowland and transitional areas. They represent some of the most extensive early woodlands established at a time when Ayrshire was left with little native tree cover. In general, these woodlands provide shelter and enclosure for parklands and the home farms. Many adopt formal and informal design layouts to enhance views from the mansion house and to accommodate carriage drives, walks and woodland garden features. The composition of these 'policy' woodlands is usually a mixture of deciduous and conifer species, often incorporating exotic specimen trees and shrubs. Typical mixes include: oak, elm, beech, lime, horse chestnut, sycamore, ash, yew and Scots pine. The inclusion of tall conifers is also common and often identifies designed landscapes from considerable distances; redwoods, firs, cedars and monkey puzzles were popular choices. Several designed landscapes occupy coastal sites where their woodlands are wind-trimmed and have dense, distorted branching patterns. This makes them particularly distinctive, and essential features of the raised beach cliff lines.
- 3.15. Arguably the most significant policy woodlands, which make the greatest contributions to the landscape, are those of Culzean Castle, Kelburn Castle, Knock Castle and Brodick Castle on the coast; Loudoun Castle, Glenapp Castle, Sorn Castle and Auchinleck inland. In addition, there are many remnants of designed landscapes and policy woodlands throughout Ayrshire which have a significant combined contribution to the settled and prosperous agricultural character of the region. Other notable policies include those of: Blair, Dumfries House, Dundonald Castle, Sundrum Castle, Craufurdland Castle, Cloncaird Castle, Caprington Castle, Rowallan and Lanfine House.

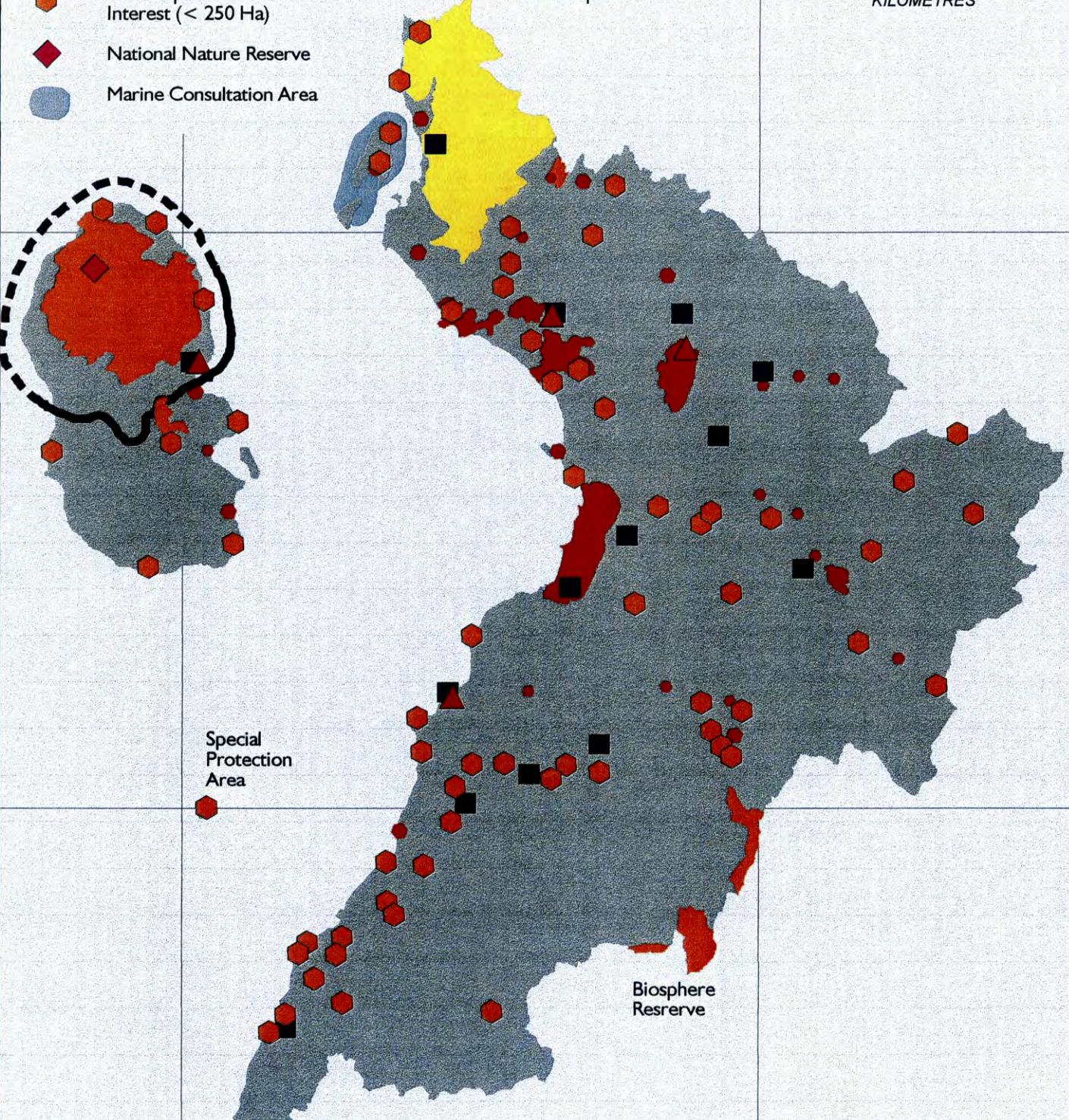
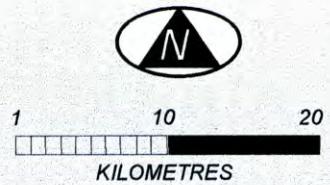
### ***Farm Woodlands, Tree Lines and Hedgerows***

- 3.16. The most widespread tree/woodland features are those of the farm landscapes, most of which originate from the 18th and early 19th centuries. An essential feature of Ayrshire's farms is the extensive pattern of hedgerow field enclosures. These define a roughly rectilinear pattern of enclosure with clipped hawthorn hedges (occasionally beech is used, but not extensively). Field sizes vary from c.0.5ha to 1.5ha in the lowland areas, become larger in the uplands, and often switching to stone dyke enclosures. The hedgerows are frequently reinforced by tree lines, usually beech, oak, ash or sycamore (elm now declining due to Dutch elm disease).

## Key:

- National Scenic Area
- Site of Special Scientific Interest (> 250 Ha)
- Site of Special Scientific Interest (< 250 Ha)
- National Nature Reserve
- Marine Consultation Area

- Regional Park
- Country Parks
- Gardens and Designed Landscapes



**Statutory 'Protected' Areas**

**Figure 5**



- 3.17. The above features are supplemented by farm woodlands in the form of shelterbelts, corner plantations and copes around farmsteads. These are often extensions of estate woodland features and commonly use mixes of deciduous and coniferous trees. The traditional shelterbelt mix of Scots pine and beech is used in places. The patterns of hedgerows, tree lines and farm woodlands make positive contributions to the farm landscapes of Ayrshire. They help to emphasise subtleties in the rolling landscape, add interest through shade and silhouettes and mark the seasonal changes more positively. In addition, they provide valuable habitats and corridors for wildlife and help to screen or mitigate the effects of developments in the landscape.

#### ***Forestry and Contemporary Woodlands***

- 3.18. The most extensive woodlands in Ayrshire have been developed over the last century by the Forestry Commission and private forest developers. In the early part of this century, coniferous forests were planted to meet Britain's crisis demands for timber. Productivity was a prime consideration resulting in the 'blanket' forests of few or single species with straight or geometric margins. Forests originating prior to the 1970s are generally of this type. In the south west of Scotland, the success of Sitka spruce as a commercial crop determined that plantations were predominantly or wholly of this species.
- 3.19. Large areas of marginal farmland were afforested, i.e. moorland plateaux, foothills and lower parts of the Southern Uplands. Extensive forests are, therefore, a common feature of these landscapes. These areas continue to be targeted for forestry and the area of commercial forest in Ayrshire is growing steadily. Current forest policy, however, encourages multi-use woodlands of high design, amenity and conservation values. Recent forest plans seek, therefore, to create more sympathetic integration with landform and land uses. The physical manifestation of these objectives can be seen in the establishment of deciduous fringes; open space patterns that respect views, heritage features and access routes; and the provision of recreational facilities. The Loch Doon area of the Galloway Forest Park best illustrates these features of modern forestry practice.

#### **Archaeological Features**

- 3.20. Evidence of prehistoric human activity in Ayrshire is most visible in Arran, where the greatest concentrations of monuments remain intact as significant features in the landscape. These include the stone-built ritual and funerary monuments such as chambered cairns, round cairns, standing stones, stone circles and inscribed stones, all of which are prominently positioned on hill slopes close to the coast and still clearly visible as man-made constructions, despite their usual grass cover or partially ruined condition. Such monuments are not absent from mainland Ayrshire, but they are not present in the same concentrations, nor do they contain monuments of the same complexity and condition. There are, however, many prehistoric features still visible in the landscape, particularly in the less cultivated hills of North Ayrshire and in the coastal hills south of Ayr. These include many cairns, a few chambered cairns (and long barrows), standing stones and inscribed stones (the Ballochmyle cup and ring marked rocks are perhaps the most significant Neolithic/Bronze Age feature in mainland Ayrshire).

- 3.21. Many prehistoric sites are difficult to detect in the landscape, but do appear under certain climatic conditions. Frost cover, snow, low sunlight and crop marks can expose the locations of ancient dwellings and lines of enclosure. These more ephemeral earth and timber structures from the prehistoric period often appear under these conditions and are subtle but intriguing components of the landscape heritage.
- 3.22. Iron Age features are more evident throughout the region as a result of their large numbers, their younger age, their long occupation and their robust construction/size of construction. Approximately 200 forts and duns have been discovered in Ayrshire. These are circular stone structures usually sited on the top of hills, ridges or prominent knolls from which they could guard surrounding farmland. Forts were generally of circular plan and built of stone. Several in Ayrshire were 'vitrified', a process which involved burning as a means of fusing stones together. This fusing process has frequently helped to preserve the structures from erosion and stone robbing. Duns are similar to forts but are smaller defensive structures capable of accommodating only one family or small group of people. While forts occasionally had outer walls and ramparts, duns generally had only an outer bank to protect a single entrance. The remains of most forts and duns represent a small proportion of their original size and many are wholly or partially overgrown. They are nevertheless easily recognised as distinctive lumps on the tops of many hills. Many other earthworks remain from the Iron Age period, the legacy of settlements and defensive structures. Crannogs, discussed in paragraph 2.35, are also distinctive local features if only few in number.
- 3.23. Of locally significant and certainly symbolic importance are the Celtic crosses which marked early Christian gathering places throughout Ayrshire. These are perhaps not major features of the landscape, and a number have been taken into museums, however, where they remain, their contribution to the local landscape character is felt.

## Built and Industrial Heritage Features

- 3.24. Ayrshire has a rich legacy of built and industrial heritage which charts the progressions over this millennium from simple to sophisticated buildings and which reflects the later changes in society as a result of the Agricultural and Industrial Revolutions. The region's geological foundations are fundamental to these processes in providing raw materials for building construction and for heavy industries. The following paragraphs seek to outline the nature of the built and industrial heritage features which have such a significant influence on the character of the region as a whole and of its constituent parts.

### ***Castles and Country Houses***

- 3.25. The Norman influenced motte and bailey castles represent the earliest form of 'castle' structure present in Ayrshire. These remain as earthworks usually overgrown and lacking any significant stone structures. The early Loudoun Castle is a good example of such a feature, now incorporated within the grounds of the later castle. Other significant 'mottes' include Castle Knowe and Montfode Burn Motte in North Ayrshire; Dalmellington Motte in East Ayrshire and the Tarbolton Motte and Helenton Motte in South Ayrshire.

## FEATURES OF THE LANDSCAPE



Several volcanic hills such as Loudoun Hill in the Irvine Valley stand as impressive natural features.



Ayrshire retains a strong network of hedges, many of which are managed regularly.



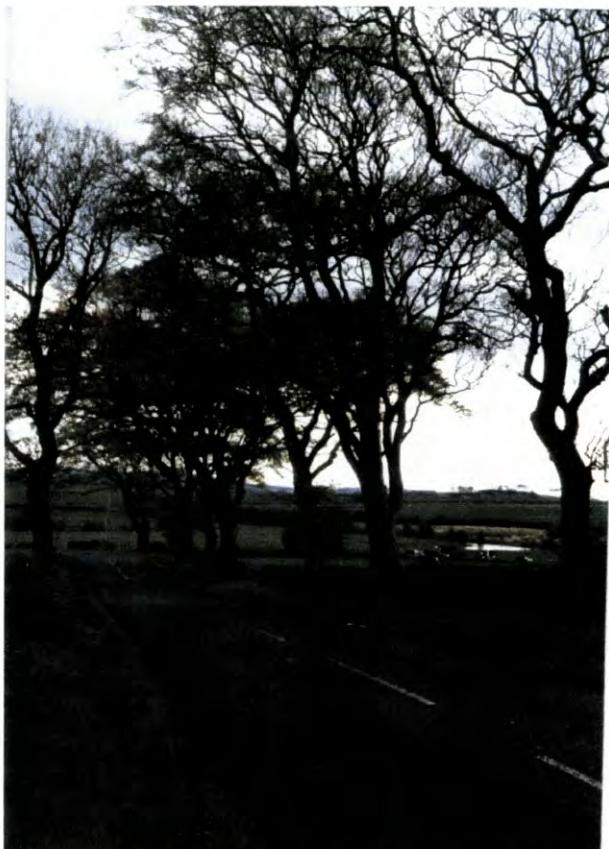
Dairying remains the principal form of agriculture within the lowlands.



Many coastal settlements experienced growth during the nineteenth century and remain popular destinations today. Lamlash on Arran.



Semi-natural broadleaf woodland often reflects the interplay of topography and exposure. Here on steep slopes in the Ayr Valley.



Mature hedgerow trees and avenues - often beech - are important lowland features.



The moss landscapes, in places affected by mineral working, are an important feature in Ayrshire. Here looking south over Airds Moss.



- 3.26. The stone built structures of later centuries are generally more significant features in the landscape, especially where they occupy commanding sites unobscured by vegetation. Loch Doon Castle, an unusual curtain-wall castle dating from the 13th century, is such a feature. It originally stood on an island in the loch but was resited in 1935 when Loch Doon was enlarged as a reservoir. More typical of the 13th to 15th centuries was the tower house, a tall defensive structure of square plan with few small windows. Dundonald Castle dates from this period and has a commanding presence on its natural rocky knoll. Lochranza Castle in Arran illustrates how many fortified houses were modified and enlarged by successive occupants. This predominantly 16th century 'L' shaped castle originated as a 13th century fortified house. It is largely intact and represents an evocative feature at the head of Lochranza Bay.
- 3.27. The late medieval period saw the consolidation and development of estates under more peaceful conditions. At their centres, castles and tower houses were enlarged, improved or replaced by more sophisticated buildings. The influence of Europe and the Renaissance was reflected in the adoption of classical architectural styling and in the layout of formal landscapes. Many castles remain from the mid to late medieval period of various sizes, styles and conditions. Regardless of their differences, they are all important local features that add mystery, romance and reinforce the identity of their surrounding landscapes. Notable castles from this period include: Little Cumbrae Castle, Ardrossan Castle, Auchinleck Castle, Martnaham Castle, Ardmillan Castle, Dunure Castle, Carleton Castle, Knockdaw Castle, Blair Castle and Pinwherry Castle.
- 3.28. Whilst many castle ruins now stand as isolated features, many of the residences of the grand estates have remained in occupation over many generations and have developed grandiose mansion houses/castles as the centre-piece to extensive designed landscapes. The most significant of these are well known regionally and nationally and have landscapes included within the *Inventory of Gardens and Designed Landscapes in Scotland* (LUC, 1987). The *Inventory* sites include: Culzean Castle, Brodick Castle, Kelburn Castle, Loudoun Castle, Eglinton Castle, Rowallan, Rozelle (in Ayr), Bargany, Glenapp, Kilkerran, Blairquhan, Auchincruive, Dumfries House and Carnell. The *Inventory* is being extended and will include up to ten more of Ayrshire's historic designed landscapes in the future.
- 3.29. The above designed landscapes and the many lesser sites combine to make major contributions to the scenic diversity and richness of Ayrshire landscapes. The grandeur of the mansions and castles, the extent and patterns of the policy woodlands, the architectural qualities of their lodge houses, follies, walls and home farms are all important features.
- Religious Buildings***
- 3.30. The medieval districts of Ayrshire contained numerous monastic orders who were responsible for the construction of abbeys at Kilwinning and Crossraguel. The former dates from the 12th century and was once an important abbey belonging to the Tironensian Order. Only fragments of the original structure remain within the grounds of the present parish church. Crossraguel Abbey near Maybole in South Ayrshire, is a more substantial ruin with standing walls and foundations from phased development between the 13th and 16th centuries.

- 3.31. Many pre-reformation ecclesiastical buildings were demolished, abandoned or redeveloped during and after the Reformation. The subsequent development of parish churches has, therefore, left many more architectural landmarks, most of which are still in use or are at least intact. The parish churches generally occupy strategic and prominent sites within Ayrshire's towns and villages; some occupy sites of older churches and locations of long standing religious significance. Most post-reformation churches from the 16th to 18th centuries are of simple form and employ classical detailing, occasionally with towers. The 19th century saw much more elaborate church architecture employing the gothic style and introducing spires to the landscape. Many of Ayrshire's later churches are built in the local (Permian) red freestone which allowed high quality stone carving and dressing.

### ***Traditional Buildings***

- 3.32. The oldest traditional domestic buildings standing in Ayrshire date from the late 17th/early 18th century. These were single and two storey houses of simple form, constructed of rubble masonry with harled surfaces and roofed with thatch. A number of these buildings have an association with Robert Burns and this has ensured their preservation in good order at Alloway (Burns Cottage), Tarbolton (Bachelor's Club) and Kirkoswald (Souter Johnnie's Cottage).
- 3.33. The majority of Ayrshire's traditional buildings date, however, from the later 18th and 19th centuries but retain certain characteristics. Most of the town and village buildings lack front gardens and are strung out along the main roads as terraces, singly or in pairs. Buildings, such as the terraces of Straiton, tend to be oriented towards the road with parallel main ridgelines. The rear gardens, some of which would originally have been working yards/ storage areas, provide a green backcloth to the generally restrained aspect of the buildings.
- 3.34. The majority of domestic buildings are constructed of stone rubble with dressed, but plain margins, sills and skews. The use of harling and rendering, usually white, is widespread and an essential characteristic of Ayrshire. Contrasting colours (usually black, brown or blue) are used to define margins which are both recessed and expressed. Mixtures of single, one and a half and two storey buildings are common in the villages, some higher buildings including tenements define the central areas of most larger towns. Roofs are generally shallow pitch and surfaced with purple-blue slates. Four-pane sash windows are most common in the region, although 12-paned Georgian windows are also widely present. Dormer windows are typical features of one and a half storey buildings; these are generally simple square dormers but also bay dormers in the north and southern parts of the region.
- 3.35. Ayrshire farmsteads are regular and often prominent features of the landscape. They usually occupy ridge or low hilltop sites and are framed by small copses. The most common layout is that of a three sided courtyard with single storey wings framing a centrally located farmhouse. The compact tidiness of most of these white-washed farmsteads projects a positive image of efficient careful farming which is echoed by the neatly clipped hedgerows in many areas.

### ***Industrial Heritage***

- 3.36. The extensive and varied industrial activities of the 18th and 19th centuries have left a legacy of industrial landscapes, buildings and engineering structures which have a significant influence on the character of the landscape, particularly in the north of the region.
- 3.37. Coal and black band iron ore mining has left numerous relics: small flat spoil mounds, larger conical bings, disused rail tracks, occasional mine buildings and numerous domestic buildings built to house the imported industrial workforce. These features can be found throughout the North Ayrshire coalfield, but are most noticeable at Muirkirk where the whole community was established to serve the industrial developments in an otherwise inhospitable location. The areas around Dalzellington and around Saltcoats, Stevenston and Irvine are similarly affected, although more hospitable for habitation. Dunaskin Iron Works at Waterside in the Upper Doon Valley, now an industrial museum, remain as part of the area's industrial heritage. Similarly, the ore terminal at Hunterston stands as a visible sign of Ayrshire's industrial past, particularly when viewed from the Cumbraes or higher ground inland.
- 3.38. Many buildings within towns, and indeed whole settlements (e.g. Catrine) were developed for industrial purposes. Several former mill buildings, engineering sheds and railway related structures and buildings remain (although many have been demolished). The harbour structures of Largs, Ayr and Ardrossan are also important urban features resulting from this period of prosperous industrial development. Shipbuilding took place at Irvine Harbour, and the town is now home to the Scottish Maritime Museum.



## **4. FORCES FOR CHANGE**

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### **AGRICULTURAL CHANGE**

#### **Background**

- 4.1. Historically, agriculture has been one of the principal influences on the evolution of the landscape of Ayrshire, shaping land uses, settlement patterns, and influencing much of the detailed grain of the landscape, particularly in the lowland basin and the main valleys. Although this century has seen many changes in agricultural policy and practice, these appear to have had a much less profound influence on the landscape of Ayrshire than in many other parts of the country. The concentration in dairying has maintained the pattern of hedged pastures which characterise the lowlands while modern farm buildings are of a scale that is in keeping with older structures. Dairying has also meant that in many areas the historic patterns of ridge and furrow remain - most visible after light snow or frost. Only in some of the more marginal areas, and in the arable areas along the coast have changes been more significant, though even here the impact has been limited. The changing emphasis of national and international policy, and the growing emphasis on more environmentally sensitive farming practices, presents an opportunity to ensure the conservation of agricultural landscapes which elsewhere have been lost. Central to any strategy must be an appreciation of the importance of agriculture in maintaining the landscape. Without a viable farming community many distinctive landscapes would deteriorate.
- 4.2. Agriculture has generally followed national trends over the last 40 years, driven largely by agricultural policy. In the post war years, the emphasis on farm productivity brought about many changes to the structure of farms which included field management, drainage schemes, the expansion of cultivated areas and the loss of traditional farm features. Since the 1970s, these changes have been partially reversed through more environmentally sensitive farming practices tailored to the European Agricultural policies.
- 4.3. Agriculture in Ayrshire has generally followed broader trends within the whole country in the last 40 years or so: amalgamation of farms and a decrease in labour. In the 1970s, money was provided by the government to improve farm structure. This involved the large scale drainage and improvement of pasture, and of arable areas. Semi-natural grassland and heather were lost through this agricultural intensification. Hay making has declined since the 1970s and silage has increased. As farms were made more productive, a number of traditional features were lost.

## **Changes in lowland farming**

- 4.4. Lowland farming in Ayrshire is dominated by dairying, a fact reflected in the name of the brown and white Ayrshire cattle. Some arable cultivation occurs, principally on better draining soils along the coast between Largs and Ayr, but also near Culzean. As noted in previous chapters, although the location of many farms in the lowlands reflects a settlement pattern dating back at least to the medieval period, the field system is comparatively recent, created during the 18th and 19th centuries following Parliamentary Enclosure. The network of small to medium sized fields, bounded by beech and hawthorn hedges with many mature trees, is a defining feature of the lowlands. Although many fields are now under ley pasture, the health of the dairy sector means that significant changes have been few. Hedges are managed, field amalgamation and hedgerow loss has been infrequent, and there has been little need to remove trees, other than when they become overmature. Furthermore, while farms complexes have expanded by the addition of modern sheds and barns, these are rarely out of scale with traditional stone buildings and are usually painted in sympathetic reds, greens or browns.
- 4.5. The dominance of hedges and hedgerow trees means that Ayrshire is sometimes described as the most English of Scottish counties. The survival of this lowland landscape is particularly significant given the deterioration experienced in many comparable parts of Scotland and England. Within Ayrshire, the first signs of decline can be detected in the form of occasional gappy or outgrown hedges, or the more common tendency not to replace felled or fallen hedgerow trees. It is an opportune time, therefore, to use incentives and other agro-environmental schemes to conserve a landscape which, though locally common, has a degree of intactness rarely found elsewhere.
- 4.6. The cultivation of cereals, and other crops including potatoes, has been characteristic of the Ayrshire farming landscape for many decades. This activity is concentrated in well defined areas along the coast, confined by the limited extent of suitable soils. While these areas typically exhibit a larger scale landscape than the inland pastures, with larger fields, fewer hedges and trees, this tends to emphasise the more open nature of coastal landscapes.

## **Changes in upland farming**

- 4.7. On higher ground and rougher pasture, sheep rearing is the main agricultural activity. As with most other food production in the EC, this is substantially supported by subsidy. Farmers within Less Favoured Areas are given additional compensatory payments for the difficulties faced by farming in these areas. Such payments are aimed at improving the viability of hill farming and helping to reduce the depopulation of upland areas as people move out of farming. In many areas private forestry has been the main alternative land use as agriculture has declined. Hardship payments, along with the favourable exchange rate that British farmers have temporarily enjoyed since Sterling left the ERM, has left farmers in a reasonable position. However, hill farming does remain economically marginal in many cases, and is sensitive to changes in domestic and international monetary policy, since by the very nature of this farming, any change in support policy could have a dramatic impact on the sector. This may be unlikely in the near future, but remains a potentially very important force for change in the landscape. Forestry is the main viable alternative land use, and it is supported by EU and national policies that seek to increase timber production and reduce agricultural surpluses. Wind energy is developing an additional option, supported by the Scottish Renewables Obligation (SRO). Both these alternatives raise concerns about potential landscape impacts.

## **Changes in the landscape: regional trends**

- 4.8. Agricultural policies also seek to achieve more extensive farming systems to reduce agricultural over-production. Since the mid 1980s, the government has sought to make farmers have more regard for the landscape and nature conservation of their land through various schemes and initiatives. The Environmentally Sensitive Area (ESA) designation has provided the opportunity for grant funding towards a range of farm conservation works. Under this scheme 'Farm Conservation Plans' are produced by the farmers for ratification by SOAEFD. These have provided the framework for conserving many important characteristic features such as meadows, drystone walls, hedgerows, farm wetlands, etc.
- 4.9. The opportunities presented by the ESA designation have, until this year, been limited to the designated area, to the detriment of all excluded areas. This situation may change, however, with the planned introduction of the Countryside Premium Scheme which will provide the opportunity for grant funding towards a broad range of countryside conservation works across Ayrshire (outside the ESA). It is to be hoped, therefore, that the beneficial effects of this scheme will soon become evident and that it will be a positive force for change in the landscape.
- 4.10. Farm diversification has not made a significant impact within Ayrshire. Although the development of farm/estate based tourism is locally evident, this is mostly related to caravaning and camping, with some recreational developments, typically 'activity holiday' facilities such as 4 x 4 courses, shooting or riding schools. It is conceivable that demands for such facilities may continue, but it is unlikely that this will be a significant force for change in the landscape.

**Changes in Agriculture:**  
**Summary of Key Landscape Issues**

***The main landscape changes related to agriculture that need to be addressed in future policies and management strategies are:***

- ***how policies and funding can best sustain a viable farming community and at the same time ensure the conservation and enhancement of the landscape;***
- ***how redundant agricultural buildings can best be conserved;***
- ***how important landscape features such as hedges, hedgerow trees and walls should be maintained;***
- ***how best to exploit the change in agricultural policies and to encourage a move to more environmentally sensitive farming practices;***
- ***how best to maintain patterns of agriculture that reflect the landscape character.***

## **General planning and management guidelines**

### **Pastures**

- Many of the pastures in the lowlands and more sheltered valleys are semi-improved or improved, creating the lush grazing that characterises the Ayrshire lowlands. The improvement of pastures has often been at the expense of wildlife-rich grasslands and meadows, except within the ESA where grants are available for the conservation of such features. Whilst improved pastures are characteristic, encouragement through financial assistance to farmers from appropriate bodies to maintain, conserve and enhance herb-rich meadows as a feature, should be considered from both a landscape and wildlife point of view. In both cases this would improve diversity in pastoral landscapes. The ESA scheme currently provides opportunities for grant support for such measures. The proposed Countryside Premium Scheme might do likewise for areas outside the ESA.

### ***Heather moorland***

- The mosaic of heather moorland in the landscape as a result of active management through muir burn and flail mowing or grazing, creates a distinct and attractive appearance. Such practices help to maintain habitats for ground nesting birds, whilst ensuring a good supply of young heather for sheep. This management practice also prevents natural regeneration of woodland and can, therefore, artificially prevent the development of upland woodland/dwarf woodland. There is an opportunity, therefore, to examine how heather moorland management could best meet both sporting/agricultural interests and landscape/wildlife interests through combinations of muirburn, natural regeneration and reduced grazing pressures.

### ***Farm woodlands and trees***

- As noted above, farm woodlands and trees are important features throughout Ayrshire, and become key space-defining elements in the lowlands. The Farm Woodland Premium Scheme and the Woodland Grant Scheme (Forestry Authority) are useful grant aid mechanisms for such work as the conservation and restoration of such features where they have been lost, although planting individual trees and tree lines may require alternative means of support (e.g. Countryside Premium Scheme). The latter are particularly important in the heart of Ayrshire where they determine the main patterns and visual boundaries. The restoration of hedgerow trees, roadside trees and farm woodland copses and belts where they have declined or been lost, should therefore be promoted.

## **Farm Buildings**

- Although farm buildings enjoy permitted development rights in principle, local planning authorities are able to influence the siting, design and materials of new structures through the notification procedures. In lowland landscapes any vertical developments become very obvious, and if of any considerable breadth, these structures can be visible from considerable distances or can become blocks on the skyline. The potential effect is increased in Ayrshire where the many farmsteads are sited on low hilltops and ridges. In small scale intimate landscapes, large structures can again become very prominent, detracting from the nature of the surrounding landscape. The impact can be particularly significant if new agricultural buildings are erected in open landscapes. To date, most agricultural developments have been sympathetic in location, scale and materials. The importance of these factors should be reflected in future policies.

## **Field boundaries - walls**

- Drystone walls are a key feature of the agricultural landscape, particularly in the more upland areas. Variations in materials and style reflect a local distinctiveness in the form of variations in geology and the distribution of river washed or glacially derived boulders. Estate walls are particularly important features in many lowland areas, distinguished by their height, mortaring and the use of dressed stone and copings. It is important that the walls continue to be maintained, and that variations across the area are recognised and conserved.

Wall repair should be further encouraged using local knowledge and craftsmen. Roadside walls and others in prominent locations should ideally receive priority treatments. Mortaring should be avoided or applied discreetly.

## **Field boundaries - hedges**

- As noted above, hedgerow boundaries are a critical constituent of many lowland or transitional landscapes, often creating a sense of enclosure and emphasising the contrast between lowlands and uplands. However, loss of hedgerows and replacement by post and wire fences would have a significant adverse effect on these landscapes and should be strongly discouraged. There may also be opportunities for hedgerow recreation or restoration. It is important to refer to the tradition for different materials/species in field boundaries within an area.

## **Implementation**

- Agriculture's central role in both shaping and maintaining the landscape means that retaining a healthy and viable farming community is essential. Large parts of the agriculture of Ayrshire, particularly in upland areas, are dependent on subsidy. It is important that the various forms of funding are coordinated and complementary and that the environmental effects of policy changes are fully assessed. It is, therefore, important that farmers and landowners are involved in the process of Countryside Management. Equally, agriculture in many parts of the lowlands is prosperous, creating the economic conditions under which farmers and landowners should be encouraged to manage the legacy of woodland and other features in an appropriate way.

## **FORESTRY AND WOODLANDS**

### **Background**

- 4.11. The development and expansion of forests in the Ayrshire uplands is one of the most significant changes in the landscape over the last 75 years.
- 4.12. The Forestry Commission was established in 1919 with a remit to build up the country's critically depleted strategic reserves of timber. Initially, a target was set for 2 million hectares of productive woodland by the year 2000. After the Second World War, emphasis was increasingly placed on potential socio-economic benefits from forestry: rural employment and import substitution. By the 1960s, demands for rural access led to an increase in the recreational use of state forests and the development of public access and facilities. During the 1980s, the concept of multi-purpose forestry developed, placing a greater emphasis on integrating recreation, conservation and landscape objectives. This was prompted by adverse reactions to early 'blanket' afforestation and by the increasing opportunities afforded by maturing forests.
- 4.13. Between 1919 and 1980, the Forestry Commission was the main forestry developer. During the 1980s, however, private forestry rapidly increased, encouraged by tax relief. This incentive ended in 1988 and resulted in a marked change in private forestry development. The Forestry Commission was restructured in the early 1990s encompassing two clear aims, the Forestry Authority and Forest Enterprise. The latter is responsible for state forest management, while the Forestry Authority is responsible for regulating state and private forests.

### **Changes in forest landscapes**

- 4.14. As earlier paragraphs suggest, the creation of early plantations was undertaken with few concerns other than the maximisation of timber yields. Within Ayrshire, very large areas of plateau moorland and upland were planted with monocultures of Sitka spruce or Douglas fir, creating dense woodlands which transformed the previously open uplands and which obscured the subtleties of the moorland landscape. Forests often extended up to road sides, thereby containing views from the road, while felling coupes were selected without regard to possible effects on either the local or the wider landscape.
- 4.15. It was during this phase of forestry practice that the first large plantations were created in southern Ayrshire. However, the Forestry Commission's policies towards forest and woodland design have been developed and refined considerably over the last 20 years. Guidance now requires that new forest plans are sympathetic to landform, provide a greater proportion of open space and of broadleaf/other conifer species. In addition, the design of felling coupes is required to add greater age diversity to the forests. All these measures should result in the marked enhancement of many commercial-forest landscapes, in terms of visual amenity, ecological diversity and recreational potential.

## FORCES FOR CHANGE



Development of a golf-based leisure park within a designed landscape at Brunston Castle near Dailly.



Farm diversification includes this animal and play park on the coast to the south of Ayr.



Development has occupied much of the lowland coast, placing pressure on remaining areas of greenspace and raising urban fringe issues.



Coniferous plantations have been established in many upland parts of Ayrshire, here in southern Arran.



Major road corridors often cut across the landscape and can have a significant influence on the pattern of settlement expansion.



Careful design and siting are essential in sensitive locations such as here on the edge of Lochranza, Arran.



- 4.16. Concern remains, however, about the wider landscape effects of large-scale afforestation within the uplands, where views tend to be extensive. While current practice should improve the overall appearance of conifer plantations, the benefits are most likely to occur in the lowland or fringe areas where a transition to broadleaf woodland, and more natural woodland shapes can be achieved. In the uplands, it is much more difficult to achieve such integration. Furthermore, there is also a concern that the balance of woodland to open land has been exceeded in particular types of upland landscape. This is explored more fully in later sections of this report.
- 4.17. The Strathclyde Indicative Forestry Strategy (Strathclyde Regional Council, 1988) highlighted five principal categories of land:
- land already bearing trees or approved for forestry;
  - 'Preferred Areas' where, subject to good practice, forestry might be promoted;
  - 'Potential Areas' where one major strategic issue occurs requiring special treatment in forestry development;
  - 'Sensitive Areas' where the combination of complex interrelated constraints requires detailed study; and
  - land unlikely to be available for large scale afforestation (prime and locally important agricultural land, protected sites, urban areas, and areas unsuited to forestry)
- 4.18. Within Ayrshire, Preferred Areas include land forming the transition from the agricultural lowlands to the uplands. Potential Areas include large parts of the uplands in the south and east of Ayrshire. Sensitive Areas and land unlikely to be available for forestry include the agricultural heart of the Ayrshire basin, together with sensitive upland landscapes including much of Arran, the hills between Largs and the Garnock Valley, and certain of the higher uplands in southern Ayrshire.
- 4.19. Potential negative changes which should be avoided in the creation of new plantations include:
- (i) the loss of visual diversity and opportunities for views due to the creation of imbalance between agriculture and forestry;
  - (ii) the loss of 'wilderness' or semi-natural landscape in remote upland areas where no commercial forestry currently exists, though the opportunities for expanding the native woodland resource in such areas need to be explored;
  - (iii) the obscuring of cultural features/patterns in formerly pastoral landscapes, e.g. the loss of drystone walls, shielings, upland rigs and ancient communication routes.

- 4.20. The government has renewed its commitment to increasing the national forest cover. There are now more incentives towards planting woodlands on better land on the fringe of uplands and in the lowlands. The agricultural productivity of the lowland areas is likely, however, to limit the planting of farm woodlands except in pockets of poorer land. This may have the effect of planting wet, rough or steep ground where wildlife interest may be significant. However, alternative forms of planting, for example the use of short rotation coppice crops could meet multiple objectives in some lowland areas, particularly where land has been damaged or degraded by industrial activity in the past.

### **Changes in policy woodlands**

- 4.21. Ayrshire contains a wealth of designed landscapes, country houses, castles and their estates. These vary in scale and grandeur, but combine to project an image of affluence for Ayrshire as a whole. The policy woodlands make important contributions to the local landscape character and in many areas help to integrate newer adjacent forests into the landscape. Many of the policy woodlands originated over 200 years ago and have undergone a combination of rotational replanting and changes in management styles and objectives. Although maintaining the same boundaries, several woodlands have changed from diverse mixtures of broadleaves and conifers to predominantly coniferous plantations. Alternatively, the policy woodlands have suffered from inadequate management and consequently lack the age diversity required to perpetuate their presence. The implications of the above are that an important element of Ayrshire's landscape may ultimately be placed at risk.

### **Changes in semi-natural and ancient woodlands**

- 4.22. Pockets of ancient and semi-natural woodland exist throughout Ayrshire, adding diversity to local landscapes and wildlife. Many of these most significant areas are protected as Sites of Special Scientific Interest. However, the registers of Ancient and Semi-Natural Woodlands (NCC, 1987, 1988 & 1991) do not take account of woodlands of less than 2 hectares. These small woodlands make valuable contributions to the landscape, but many are not adequately monitored or managed. Designation as an SSSI requires a list of Potentially Damaging Operations to be drawn up, which effectively protects the nature conservation and landscape value of the site. Further to this, the Forestry Commission, through Forestry Authority, have produced a set of guidelines on the management of semi-natural woodlands. Some of these woodlands remain threatened, or potentially threatened by grazing pressure, grey squirrel encroachment, and general lack of management, though growing interest in their nature conservation and landscape value suggests that the outlook for these woodlands is better than in recent years.

**Changes in Forestry and Woodlands:**  
**Summary of Key Landscape Issues**

***The main landscape changes related to forestry and woodlands that need to be addressed in future policies and management strategies are:***

- ***how forest dominated landscapes might be enhanced by future rotations by the application of the Forestry Commission's Environmental Guidelines tailored to their individual characteristics;***
- ***where and how 'wildland' or semi-natural characteristics should be preserved and enhanced;***
- ***ensuring that significant elements of the cultural landscape are recognised in forest plans;***
- ***ensuring that sites of local nature conservation interest are safeguarded and acknowledged in forest and woodland plans;***
- ***ensuring that the scale and types and balance of forest and woodland appropriate to the landscape character are encouraged;***
- ***ensuring that the management of policy woodlands for visual amenity/historic design authenticity is encouraged;***
- ***ensuring that all semi-natural and Ancient Woodlands are adequately monitored, managed and protected;***
- ***encouraging the expansion of the productive woodland resource base in a way which does not compromise the inherent natural and cultural heritage values of the area.***

### **Forestry Commission Environmental Guidelines**

- 4.23. The Forestry Commission produces a range of guidance documents related to many aspects of management and design. These seek to ensure that the social, environmental and economic benefits of forests and woodlands are realised for the community at large. The guidelines include *Forests and Water* (1993), *Forest Landscape Design* (1989), *Lowland Landscape Design* (1992), *Forest Nature Conservation* (1990), *Community Woodland Design* (1992), *Woodlands in Designed Landscapes* (1995) and *Forest Recreation* (1992). These documents represent not only invaluable guidance information, but are more importantly, essential components of the regulatory process. Grant and Felling Licence applications must demonstrate compliance with these guidelines to the Forestry Authority. The guidelines are, therefore, an important tool, the results of which can be recognised in the recent improvements of forest landscapes throughout the UK.
- 4.24. The Forestry Commission's Environmental Guidelines are universally applicable, but like any general guidance require to be tailored to the specific circumstances of the site/area in question. The latter part of this report identifies the characteristics of different landscape types and, where appropriate, identifies the key character considerations for forest/woodland design that should be addressed at the time of applying Forestry Commission's guidelines.

## **General planning and management guidelines**

### ***Commercial forestry***

- Patterns of open space in new forests should be developed to avoid the lack of open ground that some of the older 'blanket' forests visually and physically implied. This is particularly important in Ayrshire where mountain recreation is widespread.
- New large scale forest proposals should identify and acknowledge the cultural heritage values of landscapes by maintaining patterns of open space which allow the historic and ancient landscapes to be interpreted. This would probably require additional research into the ancient and historic landscapes and particularly into the relationships between ancient patterns of movement, settlement, farming practice and ritual or religious behaviour.
- The location and design of new forests should seek to avoid obscuring the denser patterns of stone dykes, and where practicable, should leave the dykes as legible features in open ground without encroaching or using them as plantation boundaries. Opportunities for incorporating dykes within the new patterns of open space should also be pursued. Measures should be undertaken to maintain walls peripheral to forests where they still fulfil an important visual function, e.g. beside public roads.
- The definition of 'wildland' or semi-natural areas could be used as a planning guide in response to a range of upland development pressures including wind farms, pylons, radio masts and forestry. It is recommended that further studies be undertaken to define appropriate wildland areas. The definition of such areas should involve an assessment of intervisibility which identifies visual boundary lines and peripheral zones of visual influence around wild-land areas as a basis for planning policies.
- The open character of these areas is partially a product of human land management in which sheep farming plays an important role. Discontinuation or decreases in grazing might allow natural woodland regeneration. This would potentially create a more natural landscape which should be considered in similar terms, as regards protection from development.
- Woodland and forestry proposals for upland fringe areas should seek to integrate lowland woods with upland forests. This should employ transitions from broadleaves to conifers and should provide linkages with existing shelterbelt patterns and riparian woodlands. Generally, broadleaf lower margins should be introduced and field patterns preserved.

### ***Policy Woodlands***

- There is a need to further support the management of historic designed landscapes in both the production of informed management plans and the physical implementation of the works. The special contribution of policy woodlands may be lost if they become managed for solely commercial objectives, though there is already considerable liaison between the Forestry Authority, Scottish Natural Heritage and Historic Scotland to ensure such woods are appropriately managed. The exotic mixes of specimen trees are particularly important characteristics. Policies and grants to support their management and replacement should be promoted.

## **DEVELOPMENT PRESSURES**

- 4.25. As Chapter 2 of this report demonstrated, there have been a number of distinct phases and components of development in Ayrshire. Although many modern settlements have long established origins, most experienced the greatest growth during the 19th and 20th centuries. Industrialisation in the form of coal mining, iron and steel making, and textiles led to the growth of towns such as Cumnock, New Cumnock, Glengarnock and Newmilns. Port and ferry facilities developed at centres such as Troon and Ardrossan, while Ayr, Irvine and other coastal towns developed as popular seaside towns within easy reach of Glasgow. Latterly, many heavy industries have declined, leaving some settlements without their *raison d'être*, while improved accessibility by road in particular, has encouraged commuting to and from Glasgow. The development of Irvine as a new town, the expansion of Prestwick Airport, and the development of modern industrial facilities such as the paper factory at Irvine have further influenced the pattern of development in Ayrshire. New pressures associated with wind energy and the exploitation of coal reserves by open-cast extraction also have implications for the landscape.
- 4.26. This section of the report covers the following types of development:
- (i) urban expansion;
  - (ii) building in the countryside;
  - (iii) tourism developments;
  - (iv) minor and major road developments;
  - (v) energy related development.

These issues are described below.

### **Urban Expansion**

#### *Background*

- 4.27. Over the last 30 years, there has been a steady rise in the demand for development sites within and in close proximity to main settlements, which has been accommodated through strategic and local planning on a mixture of brown and greenfield sites. While the new town of Irvine absorbed a considerable amount of development, many other settlements, such as Kilmarnock, Ayr and Kilbirnie, experienced considerable growth, often in the form of incremental additions in peripheral locations. In many cases, ring roads and bypasses were used to define the edge of settlements, with new development infilling land between the settlement and road in question. Often the expansion has pushed development outwards from the original nucleus (perhaps a bridging point or the site of a mill) with little regard for the impact on the wider landscape. This, allied to the widespread use of stark urban designs and unsympathetic choice of materials, means that 20th century development is frequently an overly prominent feature in the landscape. This is particularly the case in relation to mining settlements in the Cumnock and Doon area, where little woodland screening is present in the expansive landscape.

- 4.28. Development pressures still exist as a result of high demands for new housing and demands for strategic business developments. Demands which directly affect the landscape include:
- (i) demand for greenfield sites on the periphery of existing settlements to allow urban expansion for housing and occasionally business/industrial development;
  - (ii) demand for greenfield sites adjacent to strategic transport routes and in close proximity to settlements;
  - (iii) demands for isolated developments in the countryside.
- 4.29. Satisfying the above demands can and does cause significant changes in the character of the landscape within the zone of visual influence of settlements. These changes include:
- (i) sub-urbanisation of the countryside through the extended visual influence of new development and the inclusion of 'suburban' design elements in peripheral developments;
  - (ii) alterations to the physical and visual relationship between town and countryside;
  - (iii) loss of local distinctiveness through unsympathetic building developments;
  - (iv) loss of indigenous buildings through their inability to accommodate new uses, the lack of interest in restoration projects or through 'over-conversion' which emasculates the original character.
- 4.30. These issues to a greater or lesser degree, affect all but the uplands and the remotest valleys. The gradual compounding change could transform the everyday experience of the landscape for the resident population and modify the perception of visitors.

**Urban Expansion**

**Summary of Key Landscape Issues**

***The key landscape related issues to be addressed by planning and management guidelines are as follows:***

- ***how a strong indigenous character and identity could be created for all types of new urban development, i.e. to avoid peripheral zones of ubiquitous or characterless developments;***
- ***how new and appropriate relationships might be developed between urban expansion developments and the countryside, i.e. both visual and physical;***
- ***how the limits of urban development might be determined and landscape frameworks developed for the main settlements;***
- ***how the perception of settlements on arrival or from distant viewpoints could be influenced by planning and management to achieve the best and lasting impressions;***
- ***how new housing and other developments sympathetic to the local character, could be encouraged;***
- ***how significant original buildings might be safeguarded from dereliction, demolition or unsympathetic conversion.***

### ***Government and Local Authority Planning Guidance***

- 4.31. The Scottish Office has published Planning Advice Notes which are relevant to the subjects of urban expansion and building in the countryside. These are Planning Advice Notes (PAN) 36, 39 and 44, which cover the following subjects:
- (i) PAN 36: *Siting and Design of New Housing in the Countryside* (1991);
  - (ii) PAN 39: *Farm and Forestry Buildings* (1993);
  - (iii) PAN 44: *Fitting New Housing Development into the Landscape* (1994);
  - (iv) PAN 52: *Planning in Small Towns* (1997).

These address in general terms most of the issues prevalent in the siting and design of domestic (including farm and forestry) buildings and provide guidance suitable for universal application.

- 4.32. The planning framework for Ayrshire is currently adapting following local government reorganisation in April 1996. As comprehensive structure and local plan coverage evolves, there is considerable scope for supplementary planning guidance to address issues such as settlement and building design. There is also substantial potential for the wider use of design briefs which encourage developers to respond to the landscape context, settlement form and vernacular building styles.

### ***General Planning and Management Guidelines***

- Ubiquitous imported housing designs applied throughout the UK should be avoided. Designs for new buildings which reflect local characteristics should be promoted and local industries encouraged to produce component parts suited to Ayrshire's landscapes.
- There is a need to promote new developments of a high architectural quality where they are highly visible, form the urban edge or define the main approaches to towns and villages. Limited amounts of such development might provide an effective means of addressing the visual impact of past development.
- The potential expansion of settlement should be given defined limits to ensure the overall identity and character is not compromised. Proactive landscape planning should seek to establish landscape frameworks (e.g. new woodlands, shelterbelts, etc.) at potential development sites in order to facilitate the future integration of buildings. These should seek to reinforce existing patterns of woodland, thereby strengthening local landscape character. Where a landscape framework cannot be established, then the urban design architectural treatment should seek to produce an appropriate urban edge.
- Design briefs and even 'urban plans' should ideally be prepared by local authorities for large and sensitive sites. This would help to ensure new developments have clear identities and respond to their landscape and townscape context in an appropriate manner.

- PAN guidance does not address the development forms of contemporary business developments that demand large sites and building footprint areas, in particular that of retail warehouses, single storey industrial buildings and certain office/workshop combinations. These are typified by low cost, rapid build forms of construction and are frequently located within close proximity to strategic roads. The demand for these types of development may warrant the production of design guidance and its application to potential sites. Proactive guidance may then be useful to potential developers and be a positive influence on future proposals.

## **Building in the Countryside**

### ***Background***

- 4.33. The scenic and accessible nature of much of Ayrshire encourages interest in development in the countryside. These are predominantly demands for houses, agricultural buildings and tourist accommodation. Whilst the lowlands are characterised partially by their settled nature, continuing incremental development in the countryside could compromise the rural character and/or scenic quality of the landscape. The emergent planning policy framework reflects this pressure and has been designed to steer new development towards existing settlements. However, it is likely that there will be continued pressure for additional housing, particularly that related to agricultural and forestry activities.

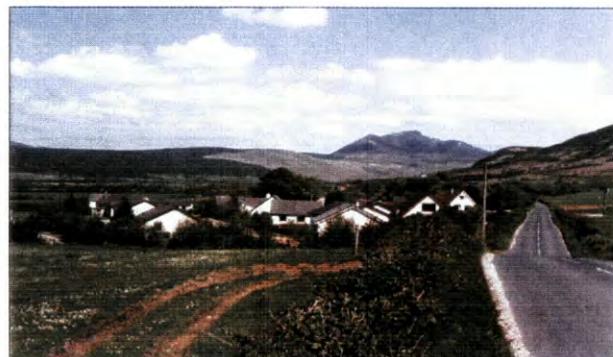
### ***Changes in the landscape***

- 4.34. To minimise adverse effects on the character of the landscape, any development that is permitted in the countryside should be encouraged to avoid higher slopes, and to favour clustering along roads, echoing the traditional pattern of development. Design guidance will be important so as to avoid particularly prominent and unsympathetically designed buildings. Even the most restrictive planning policies do not guarantee sympathetic architectural solutions. Inappropriate style, quality and siting can be unsympathetic and project a suburban image.
- 4.35. There has been some pressure for residential development within designed landscapes. While development can help fund conservation or restoration of historic houses or landscapes, and the new houses 'contained' within an existing framework of woodland, the trend raises obvious concerns about the integrity and survival of historic landscapes and the effect on wider landscape character, particularly where designed landscapes make a particular contribution.
- 4.36. A particular problem exists where a dispersed pattern of settlement developed in response to industrial activities such as coal mining. With the decline of these industries, some areas have a legacy of isolated groups of suburban houses which lack a clear function and/or supporting infrastructure. The consideration of such areas needs to be carefully considered since moves to consolidate housing could result in additional landscape impacts. It may be that alternative patterns of land use, including forestry, or the reintroduction of crofting could help sustain this rural population.

## FORCES FOR CHANGE



20th century suburban development at Ardrossan with little relationship to the surrounding landscape.



An incongruous suburban estate alongside the String Road near Machrie on the Isle of Arran.



The proliferation of signage can have an impact in a rural context.



Open-cast coal extraction is one of the principal agents of change in the Ayrshire coalfield.



Stark residential development is found on the edge of many smaller settlements, here at New Cumnock.



20th century ribbon expansion along the raised beach north of Largs.



Static caravan parks are prominent features in many parts of Ayrshire, here at Daljarrock in the Stinchar Valley.



Hunterston Ore Terminal is one of a number of the large industrial structures in Ayrshire.



- 4.37. Changes in agricultural practice have brought about a range of farm building developments and conversions. Traditional buildings, being unsuited to contemporary needs for machinery or livestock, have become largely redundant. Recent legislation requires a planning application for farm buildings over 365 sq.m. and prior notification for all other buildings. The guidance contained within PAN 39: *Farm and Forestry Buildings* (1993), coupled with the above planning controls, should result in farm building being more sympathetically positioned and designed henceforth.
- 4.38. There is a significant demand for traditional buildings as restoration projects within Ayrshire. Many of these are redundant farm buildings or isolated dwellings in the countryside. Generally, these restoration projects have significant environmental benefits; in some cases, however, there are associated changes in character. These are typically caused by changes to windows, white-wash treatments, the creation of driveways, gates and elaborate gardens, all of which change the building and its immediate setting. Other problems may arise where the development requires additional or upgraded infrastructure such as roads, water supply or foul water disposal. In flat coastal areas, for example, sewage disposal requires the use of pumping stations.

**Buildings in the Countryside:**  
**Summary of Key Landscape Issues**

***The key landscape issues related to building in the countryside that need to be addressed in future policies and management strategies are:***

- ***the capacity of different landscape types to accommodate new isolated developments;***
- ***the importance of sensitive planning policies which are able to balance the needs of the rural economy with the importance of avoiding over-development and 'suburbanisation' of the countryside;***
- ***how the siting and design of new residential buildings should best achieve integration with the different landscapes of Ayrshire;***
- ***how design guidance might prevent 'suburban' solutions from being applied in the countryside;***
- ***the identification of key design requirements in the restoration of old buildings, to avoid dilution of character;***
- ***how proposals for new farm buildings might be influenced by design guidance and planning policies in order to achieve more sympathetic results.***

### ***General Planning and Management Guidelines***

- 4.39. The following guidelines should be considered in conjunction with PAN guidance 36, 39 and 44 and with the guidelines included under paragraph 4.27.
- Proposals for new building in the countryside should be required to demonstrate an understanding and relationship with the local buildings in terms of scale, layout, materials and colour. While it may not be appropriate to reproduce replicas of historic buildings, modern design should respond creatively to local factors which may include:
    - building materials (including local building stones, use of render, harl and limewash, slate roofing and the type of drystone wall construction);
    - building layouts, which range from industrial linear villages, 'planted' villages on grid layouts, to older nucleated settlements. At a micro scale, farmsteads and hamlets often have characteristic layouts which reflect both their function and the need to shelter from prevailing winds. In the lowlands, many farmsteads are located on low hilltops and are arranged in a courtyard layout with stableblock or barn 'wings' extending either side of the two or three storey farmhouse;
    - building styles which may range from historic vernacular (often solid, low buildings of one storey or with typical dormer windows), the particular design style of estate villages to Victorian interpretation of the local vernacular;
    - local pattern of settlement and location which historically would have had much to do with the importance of shelter, defence, communication, markets, access to lowlands and higher ground, patterns of stock keeping including transhumance, land ownership, quality of agricultural land and religious factors.
  - The relationship with soft landscape components and with landforms to achieve shelter and allow views is an important characteristic of Ayrshire valleys. New developments should seek to achieve similar sympathetic relationships without contrivance or extravagant site alterations.
  - New developments should seek to match local building materials (at least in appearance) in order to reinforce local character.
  - The peripheral treatment of new building sites should be given careful consideration. Boundary treatments, gateways and edge planting can sometimes be more noticeable than the house. Appropriate detailing is, therefore, essential to avoid the expression of suburban concepts in the countryside. Design guidance and examples of best practice may be the best way of influencing these factors;
  - Building on the sites of former buildings could satisfy a number of objectives for siting, integration and relationship to infrastructure, these should be encouraged providing the original building is beyond redemption;
  - PAN 39 (1993) provides concise guidance on farm and forestry buildings which can be applied to Ayrshire. There are, however, a number of specific factors that should be considered:
    - (i) guidance and planning policies covering the conversion of typical farm

buildings could assist in the useful preservation of some of Ayrshire's fine farm buildings;

- encouragement for the use of smaller buildings with more diverse roof configurations could achieve balanced farm units where original buildings are retained beside the new.

## Tourism and Recreation

### *Background*

- 4.40. Ayrshire is a long established destination for holidays and day trips. Historically, most activity has been focused on towns along the coast, from Girvan in the south, through Ayr, Prestwick, Troon and Ardrossan to Largs. Many experienced considerable growth during the Victorian period. Outside of the main settlements, large parts of the lowland coast are occupied by the golf-courses for which Ayrshire is renowned. Ayrshire is also made famous by Robert Burns, many of whose poems and songs make reference to local places and features. Today many sites of importance are linked by the Burns Trail. Latterly, tourism and recreation pressure has taken two principal forms:
- the emergence of proposals for large scale, formal recreation developments including theme and fun parks. These may relate to sites already in use (e.g. as caravan sites), to historic estates seeking additional sources of revenue, or previously undeveloped sites;
  - the growth of informal recreation activity outwith the main tourism centres, encouraged by the potential offered by 'heritage' attractions such as castles, National Trust for Scotland properties, industrial archaeology museums and the comparatively unvisited uplands in the south.

- 4.41. While the latter is mainly complementary to the conservation and enhancement of the landscape, the former poses a greater risk of conflict.

### *Changes in the Landscape*

- 4.42. Tourist activity is evident throughout Ayrshire and the area has a broad range of facilities and attractions. These are largely based on existing features or urban centres, but some have been newly developed. The economic benefits of tourism have supported many positive works in the landscape, e.g. building restoration, upkeep of designed landscapes. There are, however, a range of impacts which require control if they are not to have detrimental effects on landscape character.
- 4.43. Ayrshire has a number of established caravan/chalet parks, several of which are prominently positioned in coastal locations. Some of these are poorly integrated with the landscape and have unsympathetic ranks of white caravans or chalets which are visually obtrusive. There is an opportunity to learn from past experience and to favour sites which have a limited impact on the wider landscape. Off-site screening may be provided both by the natural topography and by surrounding woodland and hedgerow trees. On-site planting can also play an important role, providing boundary screening and helping to break the caravan site into smaller areas.

- 4.44. The major communication routes which run through Ayrshire have generated interest in tourism developments close to the road corridors, at convenient locations close to junctions. It is possible that there may be continued demands for such isolated developments which may have significant local impacts due to their high visibility from the main road.
- 4.45. Signage related to tourism facilities can be an intrusive feature of popular holiday areas. Private signs of variable quality, positioned in an ad-hoc manner close to roads, can introduce clutter and detract from views. While planning policies do address signage, enforcement of unauthorised signs is not always carried through. Furthermore, the regulation of 'official' brown signs has been relaxed. Taken together, these factors mean that signage clutter is increasing with implications for landscape character, particularly at the local level.

**Tourism:**  
**Summary of Key Landscape Issues**

***The key landscape issues related to tourism developments that require to be addressed by planning policies and strategies are:***

- ***the siting and appearance of caravan and chalet parks and the opportunities to enhance established facilities;***
- ***the potential landscape effects of major tourism developments at 'honey pot' towns;***
- ***the need to reconcile different forms of recreation and steer intrusive and noisy activities to suitable locations;***
- ***landscape implications (both beneficial and potentially adverse) of rural diversification and the growth of 'green tourism';***
- ***the need for control of private signs to prevent signage clutter in the landscape;***
- ***landscape implications of growing volumes of visitor traffic - both direct (noise, movement, etc.) and indirect (demand for car parks, road improvements etc.).***

***General Planning and Management Guidelines***

- Caravan and chalet park developments illustrate how easy it is for such facilities to undermine the character of the landscape. It is important, therefore, that such developments are carefully controlled, and steered to locations where the topography or land cover limits their impact on the wider landscape. The sensitive choice of materials, colours and screen planting can reduce these impacts still further. There is a need to address the landscape impacts of existing park developments.

- The landscape implications of tourism related traffic should be considered, both in general and in relation to specific development projects. Parking provision, minor and major road provision and signage, all have a landscape impact. Equally important are the effects of noise and vehicle movement in some of the more remote and tranquil parts of Ayrshire. Green tourism projects based on cycling, walking or horseriding, or served by public transport, could provide the opportunity to develop less car-oriented tourist attractions.
- Without effective and coordinated management, even the most benign forms of recreation, such as walking, can result in erosion, landscape damage and conflict with other interests. With the increasing range of rural recreation activities and the growth of particularly noisy activities, the role of management and cooperation becomes even more essential.
- 'Green tourism' may provide scope to develop tourism and recreation activities that respond to an area's local distinctiveness through community involvement and emphasis on landscape conservation.
- A signage policy and guidance for private signs/tourism promotion would help to prevent signage clutter and preserve landscape character.

## Road Developments

### ***Background***

4.45. Ayrshire is traversed by several major roads (A76, A77, A78) which generally follow lowland coastal and major glen routes through Ayrshire. The principal exception is the A77 which crosses the moorland hills between the Clyde Valley and the Ayr Basin. The trunk roads have been subject to varying scales of road engineering work by the Scottish Office to improve their efficiency and safety. The remainder of the public road network is the responsibility of the local authorities who have a statutory responsibility for its management.

### ***Changes in the Landscape***

4.46. The A77 is the most significant road in Ayrshire, linking Glasgow, Ayr and Stranraer and one which has been the subject of progressive improvements over the last 30 years. These have involved the construction of considerable lengths of dual carriageway, local widening and realignment of the original road, and major bypasses around settlements such as Ayr and Kilmarnock. To the south of Ayr, the road follows the raised beach. Coast improvements here have included new rock cuttings to allow widening and straightening. Many of these works have affected the local landscape, altered travellers' perceptions of the surrounding area and influenced the pattern of urban and suburban development.

4.47. Similar works have been undertaken along other strategic routes such as the A78 to the north of Ayr where a high quality dual carriageway has been constructed. These have all generated landscape impacts, not only related to the roads, but also in the surrounding areas where borrow pits, local quarrying, sand and gravel extraction and temporary works have been required.

- 4.48. While these strategic improvements have increased traffic efficiency, they have changed both the local landscape character through the scale of construction works and the volumes of traffic generated; they have also affected the way in which motorists perceive the landscape due to the increased speed of traffic and the 'corridor' effect of the major roads. Future improvements, including further dualling, and the creation of grade separated junctions may increase these effects.
- 4.49. Changes to minor roads are less noticeable, but the compounded effect can become significant. Local road improvements such as junction improvements and minor realignments can result in the removal of characteristic features such as hedgerows, walls, trees and old signs and the introduction of suburban elements such as kerbs.
- 4.50. Improvements to rural roads may be required in the future to facilitate forestry haulage, it is important, therefore, that any such loss of characteristic features is mitigated by reinstatement works.

**Road Developments:**  
**Summary of Key Landscape Issues**

***The key landscape issues related to road developments that require to be addressed by planning policies and strategies are:***

- ***how to reduce the impact of existing major roads;***
- ***how the landscape design of new road corridors could reflect and reinforce the character of landscapes traversed;***
- ***how the scenic qualities of certain landscapes might be acknowledged by innovative road engineering which avoids crude cutting and filling;***
- ***how the characteristic features and inherent interest of the minor road network could be preserved and maintained, i.e. hedgerows, verges, tree lines, walls and bridges;***
- ***how roadside services and facilities can best be located and designed.***

***General Planning and Management Guidelines***

- Design guidance contained within the *Design Manual for Roads and Bridges*, (Scottish Office Industry Department, 1993) Volumes 10 and 11, should be applied, taking due regard for the local landscape characteristics of Ayrshire. The analysis of visual and landscape effects of road schemes should also be guided by the Countryside Commission's document *Landscape Assessment Guidance* (CCP 423, 1993) and *Guidelines for Landscape and Visual Impact Assessment* published jointly by the Landscape Institute and the Institute of Environmental Assessment (1995).

- The management of existing roads may require a different emphasis if their essential characteristics are to be maintained, e.g. tree avenues, narrow bridges, sinuous alignments. The Scottish Office is currently examining the potential for establishing a rural road hierarchy. This aims to define management types and priorities for rural roads, distinguishing between functional and categories of leisure roads. This would allow the current statutory standards to be waived in favour of a conservation led approach for many rural roads.
- For extensive ongoing road programmes, the landscape treatments for the entire road corridor should be reviewed as a strategic project to ensure that a strong regional character will ultimately be projected and that the subtleties of the local landscape character changes are also acknowledged. On and offsite landscape works should be designed to integrate the road into the broader landscape.
- For areas of designated and perhaps locally appreciated scenic value, there should be an emphasis on high quality sensitive engineering solutions, e.g. bridge design by competition, as at Glencoe.
- The adoption of a rural roads management programme could make positive contributions to the countryside, if all characteristic features of the road corridors were addressed. Such a programme would require a multi-agency approach if all opportunities for visual amenity, wildlife and recreation are to be realised.
- Approaches and gateways to towns and villages should ideally be announced subtly in the design of roads and their landscape corridors. Roadside treatments such as tree lines, walls and hedgerows, combined with low-key carriageway alterations, may be able to create a gateway effect without the need for a proliferation of warning/speed restriction signs in the landscape. Again, this requires integration and cooperation to ensure that the messages given by the built environment and the road corridor coincide.
- Roadside services and facilities should be located so as to minimise their impact on the wider landscape. Screening topography and woodland can help in this respect. The design should similarly seek to minimise visual intrusion. There may be opportunities to adopt local building styles and materials. The night-time landscape, in particular the effect of street lighting and vehicle lights, should be considered carefully since the principal route corridors pass through otherwise rural and undeveloped areas.

## **Energy Related Development**

### ***Introduction***

- 4.52. Ayrshire has a history of development related to the energy sector. Historically, coal was won from small drift mines and pits, and later the Ayrshire coalfield was subject to large scale exploitation by deep mining. Facilities such as the ore terminal at Hunterston were developed to allow the import and export of minerals, including coal. Recent decades have seen transformation of the coal industry with the replacement of deep mining by open cast operations. Even more recently, concerns about the possibility of the 'greenhouse gas' have prompted policies designed to encourage the development of renewable energy technologies including wind power, biomass, small-scale hydro, solar power and energy from waste schemes.

### ***Legacy of Past Coal Mining***

- 4.53. Many decades of shallow and deep coal mining, together with associated iron working, have left a legacy of bings, damaged land and the remains of related infrastructure such as railway embankments, inclines and bridge structures. Most bings are of relatively modest size, and while some have been reclaimed, many remain as important features in the local, and often wider, landscape. Many longer views across the southern part of the Ayrshire basin are punctuated by the steep-sided, flat topped spoil tips which rise above the surrounding landscape.
- 4.54. These industrial remains, together with those associated with iron and steel making, are the subject of differing opinions. For many, the bings in particular - comprising much damaged and derelict land - represent the worst of Ayrshire's industrial past. In locations such as the Doon Valley, for example, the old bings tower above settlements and appear to fill the valley. For others, these remains comprise an important 'layer' in Ayrshire's history, part of the area's cultural heritage. Furthermore, many sites have been colonized by a range of relatively rare plant communities. These conflicting opinions suggest a pragmatic approach which identifies and conserves the best examples of these historic remains, but which recognises that elsewhere the expression of other interests, including the wish for environmental enhancement, may result in the gradual or more rapid loss of features. It is perhaps ironic that it is open cast coal workings which pose the greatest threat to these and other historic remains. To an extent, this approach is reflected in the designation of areas of particular archaeological importance, and the requirement for archaeological appraisal prior to major developments.

### ***Open-Cast Coal Working***

- 4.55. By its very nature, open-cast coal working has the potential to result in very significant short and long term effects on the landscape. Typical operations include the creation of access and haul roads, the construction and planting of screening bunds, excavation of largest areas (often in a progressive manner), the storage of overburden and topsoil as well as extracted coal, movement of coal off-site (usually by road), and site restoration. Although many of the landscape impacts associated with these operations are temporary in nature, they may extend over a considerable period. The location and prominence of sites chosen for open-casting is, therefore, a key concern. The nature of the surrounding area may also be important. For example, a hillside open cast site may appear more prominent in a predominantly agricultural landscape than in one which has already been modified substantially by industrial activity. Alternatively, it may be considered that the latter area would experience unacceptable cumulative impacts. Of course, the choice of potential sites will be constrained by the existence of accessible coal deposits.
- 4.56. The East Ayrshire Open-Cast Coal Subject Plan (East Ayrshire Council, 1998) covers the area under the greatest pressure from open-cast coal working. The plan draws together information on exploitable coal deposits and environmental constraints to identify what are termed 'open-cast coal priority areas' and 'open-cast coal preferred areas'. It is likely that these will provide the focus for coal working over the coming decades. Priority areas are concentrated in the upper Doon and Ayr valleys. Preferred areas are concentrated in the area between the upper Doon valley and Upper Nithsdale.

- 4.57. The restoration of open-cast sites is a further issue of importance for the landscape. Although past schemes have tended to include the nominal restoration of sites to their previous land use, rarely has this been entirely successful. One of the most consistent criticisms of past open-cast restoration schemes has been the bland nature of the new landscape, often with constant engineered gradients, unrelieved by localised changes in topography or vegetation and lacking the features and grain which combine to create landscape character.

**Open-Cast Coal Workings:**

**Summary of Key Landscape Issues**

- ***should new open-cast coal workings be concentrated in areas with a history of coal extraction and related industrial development?***
- ***how can more detailed site selection take into account potential effects on the wider landscape?***
- ***how can detailed design of the workings (including on and off site screening, layout of operations, treatment of access roads, etc.) take into account potential effects on the landscape?***
- ***how can appropriate and effective site restoration proposals be achieved and implemented?***

***General Considerations for Planning and Management***

- 4.58. NPPG4: *Land for Mineral Working* (Scottish Office, 1994) provides general guidance for open-cast coal working. The guidance sets out the tenets of a sustainable framework for mineral extraction:
- to conserve minerals as far as possible, while ensuring an adequate supply to meet the needs of society for minerals;
  - to minimise production of waste and to encourage efficient use of materials, including appropriate use of high quality materials and recycling of waste;
  - to encourage sensitive working practices during mineral extraction and to preserve or enhance the overall quality of the environment once extraction has ceased;
  - to protect designated areas of critical landscape or nature quality from development, other than in exceptional circumstances where it has been demonstrated that the development is in the public interest.
- 4.59. It goes on to describe how planning authorities should:
- identify preferred areas for mineral extraction;
  - safeguard deposits from development;
  - protect areas of importance to natural and built heritage;
  - achieve sensitive working practices;
  - achieve a high standard of restoration, after use and aftercare.

- 4.60. The following paragraphs aim to enlarge upon this general advice, providing guidance on site selection, the design and implementation of works and subsequent site restoration.

### ***Site Selection***

- 4.61. The location of suitably accessible coal reserves will be the principal factor influencing the selection of areas for open cast working. Practical and operational factors, such as the depth of coal measures and the nature of local infrastructure may also be factors. Landscape issues should also be reflected in the selection of areas of search and individual sites. The former choice should be influenced by both landscape character and quality. Although it is important to consider the cumulative impact, it may be appropriate to steer new open cast proposals to areas with an existing industrial character, and where the landscape has been modified or damaged by past or present activity. Areas with a non-industrial character, typically dominated by agricultural or upland landscapes, should not normally be included within such areas of search.
- 4.62. More detailed site selection should be guided by a number of factors including:
- specific natural or cultural heritage interests (many upland parts of Ayrshire, particularly the Mosses, are of considerable nature conservation interest and do not lend themselves easily to restoration or recreation);
  - visibility of the site, overburden storage areas, associated infrastructure including access roads;
  - scope for on and off site screening;
  - potential for site restoration.
- 4.63. Environmental Assessment provides the most effective means of considering many of the issues. Used during the site selection and design process, Environmental Assessment can produce significant environmental benefits.
- 4.64. Restoration proposals should reflect the existing character of the site, and its position in relation to both the immediate context and the wider landscape. The aim should be to create a landscape which is of equal or higher quality than that lost to open casting. Simply replicating what was previously present on the site may not be the most appropriate solution and consideration should be given to the scope for enhancement in terms of:
- creating a new landscape resource (e.g. woodland, water, recreation);
  - recreating features lost over previous decades (e.g. hedgerow loss as a consequence of agricultural improvements);
  - habitat creation and enhancement.
- 4.65. In all cases, it is essential that the site is seen in the context of the surrounding landscape and that features such as woods and hedges are used to tie the site into its context.

- 4.66. The development of restoration proposals should consider the landscape in two ways:
- basic landscape structure (influenced by broad topography allied to general patterns of land cover and natural habitats);
  - more detailed landscape grain (influenced by minor elements including local topography, drainage, vegetation, vernacular features, human influence and public access).
- 4.67. It is in the area of landscape grain that many restoration schemes have failed in the past. Factors which comprise the 'landscape palette' and which may be varied to create grain and local distinctiveness include:
- broad and detailed landform features including general contours, small banks, hollows, convex and concave slopes;
  - drainage, influenced by topography and comprising ditches, burns and streams, and areas of wetland;
  - soils, differentiation of soil types and depths to create different growing conditions or habitats;
  - aspect - for example, north and south facing slopes have different soil and moisture conditions and vegetational responses;
  - herbaceous vegetation which may range from ley pastures, amenity swards, herb rich meadows and particular habitats such as wet meadows, fens, bogs and moorland. However, it will be difficult to recreate many upland vegetation patterns, particularly over extensive areas;
  - access, including publicly accessible paths, farm or mountain tracks, carefully related to historic alignments and boundary connections;
  - field boundaries which should reflect previous and surrounding patterns in terms of alignment, field size and materials (hedges, walls, fences, banks, ditches). Fields should usually vary in size and shape;
  - tree cover may include shelterbelts, copse, larger woods, field boundary trees, or 'semi-natural' patterns reflecting topographic variations;
  - features and structures which may include walks, signposts, site furniture or even buildings, again related to local materials and styles.
- 4.68. Ideally, these proposals should be set out in a Restoration Plan, providing information on:
- the mitigation and design of off-site access routes to eliminate impacts and, where appropriate, provide new landscape features;
  - location of stockpiles to provide interim screening;
  - where timescales permit, advance planting on and off site to minimise impacts and provide interim landscape fit;
  - protection of conserved elements around and beyond the edge of the site;
  - landform of the restored landscape to meet the needs of the proposed after-use, to provide appropriate landscape fit and provide appropriate drainage;
  - local topographic incidents, features and variation;

- the reinstatement or creation of specific drainage features (burns, pools, lochs, wetlands, etc.).
- alignment of paths and tracks;
- distribution of soil types and depths, including both subsoil and topsoil.

### ***Renewable Energy***

- 4.69. Concerns about the effects of acid rain and rising concentrations of atmospheric carbon dioxide (the so-called greenhouse effect) have prompted a move away from fossil fuel power generation and towards alternatives including energy sources such as wind, wave and solar power or biofuel and waste incineration. As we describe below, targets for renewable energy power generation have now been set and local authorities are required to facilitate its development. To date, most interest has focused on wind energy, with a number of wind farms (comprising groups of wind turbines) already having been built and many others proposed. However, this interest is tempered by concerns that those areas with the highest wind speeds (thus potentially most suited to wind power generation) also tend to be those areas with the most sensitive landscape (generally upland and coastal areas).
- 4.70. NPPG 6: *Renewable Energy* (Scottish Office, 1994) requires local authorities to plan '*positively for renewable energy where this can be achieved in an environmentally acceptable manner*', and to '*safeguard sites with potential for renewable energy projects*'. It recognises that there is a need to reconcile the siting of renewable energy developments with the protection of important environmental assets within nationally important areas (such as NSAs and Regional Parks) such schemes should only be permitted where the integrity and underlying objectives are not affected and where adverse effects are outweighed significantly by the national benefits that would result from the development. Turning specifically to wind power, NPPG 6 states that wind turbines should only be permitted where they would '*not be significantly detrimental to areas valued for their landscape character*'.
- 4.71. NPPG 6 requires planning authorities to define areas of search for renewable energy developments, to safeguard areas considered suitable for renewable energy development and to define areas where, because of environmental and other considerations, such developments are likely to prove difficult to reconcile with other policy considerations. The development of an integrated strategy for renewable energy in Ayrshire should therefore be regarded as a priority. This should examine the practical potential for each type of renewable energy in greater detail, taking into account the basic resource itself, technical constraints, along with key environmental, commercial and other planning constraints affecting realisation of the overall potential. The development of a renewable energy strategy, which is reflected in the planning policy framework, will assist in the consideration of proposals for wind turbines or wind farms. By examining and planning for the potential for other forms of renewable energy, the strategy would demonstrate a positive commitment to the overall benefits offered by alternative sources of power.

Key sources of renewable energy within Ayrshire, in addition to wind, may include:

- small scale hydro schemes at former mill sites (e.g. within industrial settlements in river valleys). By utilising existing infrastructure, wider landscape and ecological effects can be kept to a minimum;
- domestic and agricultural waste (incineration or anaerobic digestion to create biogas). While processing plant would be required, this approach would help reduce the need for landfilling or other forms of disposal;
- biomass (e.g. short rotation coppice) in the lowlands and valleys. Although a temporary effect, this could have a local influence on landscape character;
- residues from forestry management and timber processing. Again, although processing plant would be required, this would be generally small in scale and would make good use of an otherwise wasted resource.
- energy savings achieved by passive solar design, active solar technology and the use of solar cells (photo voltaics).

Most of these alternative forms of renewable energy are relatively small scale, or require processing and generating plant which differ little from conventional industrial or agricultural developments.

## Wind Farms

### *Introduction*

- 4.71. There is growing interest in wind farm development in Ayrshire. While for many, wind farms are a novel and exciting means of generating 'clean' electricity, some point to potential landscape and other environmental impacts, particularly when they are built in otherwise undeveloped areas. It is also helpful to distinguish between small scale schemes which supply local needs (perhaps in a remote location) and which require relatively small turbines (comparable to the old agricultural wind pumps which can still be found in Ayrshire) and the larger scale developments designed to supply power to the National Grid. The latter can comprise tens of turbines, each with a tower of up to 45 metres and rotor of up to 35 metres, taking their overall height to about 80 metres. Local planning authorities have a key role to play in balancing the environmental benefits and impacts of wind farm development, and steering such schemes to locations which meet environmental as well as technical criteria.
- 4.72. Appendix A to PAN 45: *Renewable Energy Technologies* (Scottish Office, 1994) provides further information and guidance on wind power developments. The Appendix sets out criteria thresholds to determine whether an environmental assessment is required under the Environmental Assessment (Scotland) Regulations 1988 (as amended in 1994):
- the proposed development is located within or is likely to have significant environmental effects on a sensitive location such as a National Scenic Area, SSSI or Natural Heritage Area (none designated to date);
  - the proposed development is located within or is likely to have significant environmental effects on any other area valued for its landscape character;

- the development consists of more than 10 wind generators;
  - the total installed capacity of the development exceeds 5MW.
- 4.73. From this discussion, it is clear that planning authorities have a critical role to play in the development of wind power. The following sections outline the effects of wind farm development by providing a framework for assessing the implications for individual landscape types.
- Changes in the Landscape***
- 4.74. The development of wind farms is guided by three principal groups of factors. Firstly, there are the technical issues that influence location. These relate primarily to the incidence of the high wind speeds that are required for power generation. As noted above, this requirement tends to favour coastal and upland areas since here average wind speeds tend to be significantly higher than in more sheltered locations. Additional technical factors include the need to link into the National Grid at a suitable location (the grid tends to be least dense in remote areas and the installation of new cables tends to be both expensive and environmentally damaging), the need to avoid electro-magnetic interference and the need to provide road access (suitable for articulated vehicles) to the site in question. Economic factors are closely related to technical factors, further limiting the areas where the costs of development and operation will be outweighed by the revenue accruing from power generation. The third group of factors that should govern the choice of wind farm sites comprises the likely environmental effects. These may include:
- visual intrusion and effect on landscape character;
  - effect on nature conservation;
  - noise;
  - secondary effects resulting from links to the National Grid or the provision of road access.
- 4.75. While the last three of these issues are important concerns, this discussion focuses on the implications of wind farm development on visual intrusion and landscape character.
- 4.76. The landscape impact of wind farms will, in turn, reflect a variety of factors. Most significant, perhaps, are the size of individual turbines (45 metres high with a rotor diameter of 30-35 metres, bringing their total height up to 80 metres), their vertical, modern and industrial appearance and the movement that they introduce into the landscape. While in some situations the structures can be almost sculptural, turbines can appear incongruous, particularly in a sparsely developed upland or coastal location. Clearly, the effects increase with the number and density of turbines in any single wind farm development. Associated infrastructure, including buildings and service roads can also be visible features. Cumulative impact where more than one wind farm is visible from a particular location or where travellers encounter two or more in close succession may also be a concern.

- 4.78. In assessing the potential effects of wind farm proposals, it is helpful to distinguish between landscape impacts and visual impacts. Landscape impact relates to the effect of a given development on the overall character of an area. It will generally be the case that wind farms will have the greatest landscape impact in simple, undeveloped landscapes with a dominance of horizontal elements. Conversely, wind farms are often more easily accommodated in more complex and developed landscapes where there are already vertical elements (perhaps pylons, masts, steep valleys, or individual trees) or sources of movement or activity. One of the principal causes of concern regarding wind energy is that technical and funding factors favour upland locations which, in many cases, comprise simpler moorland landscapes.
- 4.79. Visual impact, on the other hand, relates to the effects upon particular viewpoints and upon human beings as receptors. Visual impacts will relate to the prominence of a wind farm, and the number of people 'exposed' to it. Of course, people's reactions will vary, often reflecting their particular activity, or the nature of the viewpoint affected. While a wind farm may provide a suitable landmark for someone travelling long distance by road or rail, it is likely to be more intrusive for a walker moving slowly through the hills. Distance can be a critical influence on the scale of visual impact. Research indicates that, although wind farms can often be detected at a distance of 30km or more, they only tend to be particularly visible at a distance of 15-20km or less. This represents a fairly crude rule of thumb and much depends on the intervisibility of the site and viewer, the nature (particularly the degree of complexity) of the intervening landscape, and, of course, prevailing weather conditions.
- 4.80. Since wind farms may be visible over a considerable area, it is important that the impacts on surrounding landscape types and designated areas is taken into account during the consideration of planning applications.

**Wind Farms:**

**Summary of Key Landscape Issues**

- ***Interest in wind power is likely to increase over the next few years. Can the environmental benefits of this renewable energy generation be balanced with the need to protect other aspects of the environment?***
- ***Wind turbines are often visible features in the landscape, in part reflecting their size, modern and industrial design, vertical orientation and the movement of their blades. How can they best be incorporated into the landscape ?***
- ***Given the common coincidence between areas of high scenic value and areas with the highest average winds, how can the planning system balance the need to select prominent sites with the need to protect the most sensitive landscapes?***
- ***How can natural topography and land cover be exploited to screen and backcloth wind farms?***
- ***Are some landscape types better suited to wind farm development than others?***

### ***General for Planning and Management Considerations***

- 4.81. In accordance with the approach recommended by NPPG 6 we consider that the local authorities should take a proactive role in defining areas with potential for wind farm development and those areas where such development cannot be reconciled with other policy objectives. Although factors such as noise, safety, proximity to National Grid connections and communications may influence this analysis, it is the effect on landscape, and upon nationally protected landscapes, which are likely to be most significant in defining these areas. The analysis of landscape types provides broad guidance on the acceptability of wind farm development in different areas. However, it would be simplistic, and probably misleading to calculate the actual scope for wind farm development on this basis since many more local factors are likely to be significant in defining suitable sites within areas of search. We explore some of these factors below and outline the importance of environmental assessment in the design process.
- 4.82. The following locations are likely to be particularly sensitive to wind farm development:
- extensive upland areas where development is sparse and views extensive;
  - areas designated for their landscape or nature conservation value;
  - small scale landscapes;
  - skyline sites;
  - prominent locations where the development can be seen by large numbers of people (e.g. residents, travellers or visitors);
  - areas where two or more wind farms are visible from a particular location, or where two or more wind farms are seen in close succession.
- 4.83. Taken together, these factors apply to much of Ayrshire. The challenge, therefore, is to determine the extent to which these issues can be addressed during the design and implementation of schemes.

### ***Environmental Assessment***

- 4.84. The process of environmental assessment should be used to influence wind farm development from the outset of scheme design. Like the assessment of other developments, it should be regarded as a process rather than a single stage which is undertaken prior to submission of a planning application. In particular, the assessment process should:
- examine alternative sites;
  - examine the scope for alternative site layouts. There may be scope to reduce the visual impact of a scheme, for instance by removing turbines from the skyline, without making it unviable;
  - the impact on the character of the surrounding landscape, taking account of those landscape types from which the development would be seen;
  - the impact on sites designated for their landscape or nature conservation value;
  - the scope for on-site or off-site mitigation, including the use of additional planting;
  - impacts during construction and decommissioning.

Guidance on assessment techniques are set out in PAN 45 and NPPG 6, together with the Institute of Environmental Assessment/Landscape Institute document *Guidelines for Landscape and Visual Assessment* (1995) and the Countryside Commission document *Landscape Assessment Guidelines* (1993).

#### **Design**

- 4.85. It is important that wind farm developments respond to the character of the surrounding landscape. As a general rule, flat or open landscapes should be avoided since here views will be long and the turbines will often be visible against the sky. More undulating landforms are likely to provide better screening. Wherever possible, skyline locations should be avoided in favour of sites where the natural land form provides a backdrop against which the wind farm would be seen. Existing land cover (particularly woodland or forestry) may accentuate the screening provided by the landform.
- 4.86. We consider that locations within coniferous plantations may have the potential to reduce a number of the environmental impacts noted above for the following reasons:
- woodland would provide screening for turbines, particularly when viewed from nearby. Associated buildings would be concealed from view;
  - to some extent, coniferous forests already present a modified upland landscape. This offers scope for the siting of wind turbines and may help to ease the pressure on open landscapes;
  - infrastructure such as forest and access roads usually already exists in these areas.
- 4.87. However, the option of steering wind farm development to forest locations requires technical assessment since the presence of trees may alter the characteristics of windflows. It is also recognised that commercial forestry activities usually avoid the most exposed areas. Account should also be taken of the forestry harvesting and management plans in order to ensure that the benefits of woodland screening are sustained.

## **CLIMATE CHANGE**

- 4.88. There has been considerable debate about the phenomenon of climate change which may result from higher concentration of carbon dioxide and other 'greenhouse' gases in the atmosphere. Potential effects include rising temperatures, rising sea levels as ice caps melt, and a decrease in climatic stability resulting in more frequent episodes of storminess or drought. It is too early to draw firm conclusions about the scale and nature of these changes in relation to the landscape of Ayrshire. Possible scenarios include:
- rising sea levels creating pressures along the coastline;
  - changing temperatures and rainfall patterns with implications for upland vegetation, woodland, etc;
  - increased incidence of drought with implications for agriculture and soil stability.

- 4.89. Many of these scenarios are of a major scale and, should they become reality, we could do little but modify patterns of activity, management and planning. In situations such as along the coast, however, we face a choice. We could either respond to rising sea levels by raising sea defences (thereby protecting farmland and other property, but squeezing the ecologically important intertidal zone), or we could accept the changes and institute a programme of managed retreat of the coastline.
- 4.90. Although the effects of climate change could affect most landscape types in some way, consideration of the issue in subsequent chapters has been limited to situations where management responses to such change would have serious implications for the landscape.

## **5. LANDSCAPE CHARACTER TYPES**

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### **INTRODUCTION**

- 5.1. In this section of the report we examine the landscape character of Ayrshire. In examining the principal influences on landscape character, and identifying the combinations of features or qualities which are critical in defining that character, a basis for future landscape planning and management is established.

### **SUMMARY METHODOLOGY**

- 5.2. In analysing and describing the Ayrshire landscape we broadly followed the approach recommended in the document *Landscape Assessment: Principles and Practice* published by the Countryside Commission for Scotland (1991). We were also mindful of the guidance issued by the Countryside Commission in their document *Landscape Assessment Guidance* (1993). The method comprised three principal stages:
- (i) **Desk Study** wherein a range of information on geology, landform, land use, land cover and settlement are mapped and analysed to identify draft landscape character types and draft landscape character units which group together areas with similar attributes. The desk study stage of the assessment also included a review of other descriptions of the landscape and consultation with relevant parties;
  - (ii) **Field Survey** when the draft landscape types and units are tested on the ground and the character of the landscape recorded, using both written description and photographs;
  - (iii) **Analysis and reporting** when the desk and survey information are brought together to produce definitive descriptions of each landscape character type.
- 5.3. A fuller explanation of some of the terminology used in the description of landscape types is included as Appendix 1.

### **ASSESSMENT HIERARCHY**

- 5.4. This approach enabled the landscape to be described in a hierarchical framework which established the pattern of variation in the landscape. This framework is based upon the identification and description of Regional Character Areas, Landscape Types and Landscape Units (or Local Landscape Areas) defined as follows:
- (i) **Regional character areas** are recognisable as distinct landscape regions at a broad scale, based upon general characteristics such as landform, geology, soils, land use, ecological associations, historical associations and urban and industrial activity. The principal regional character areas are described later in this section.

- (ii) **Landscape types** are tracts of countryside which have a unity of character due to particular combinations of landform, landcover and a consistent and distinct pattern of constituent elements.

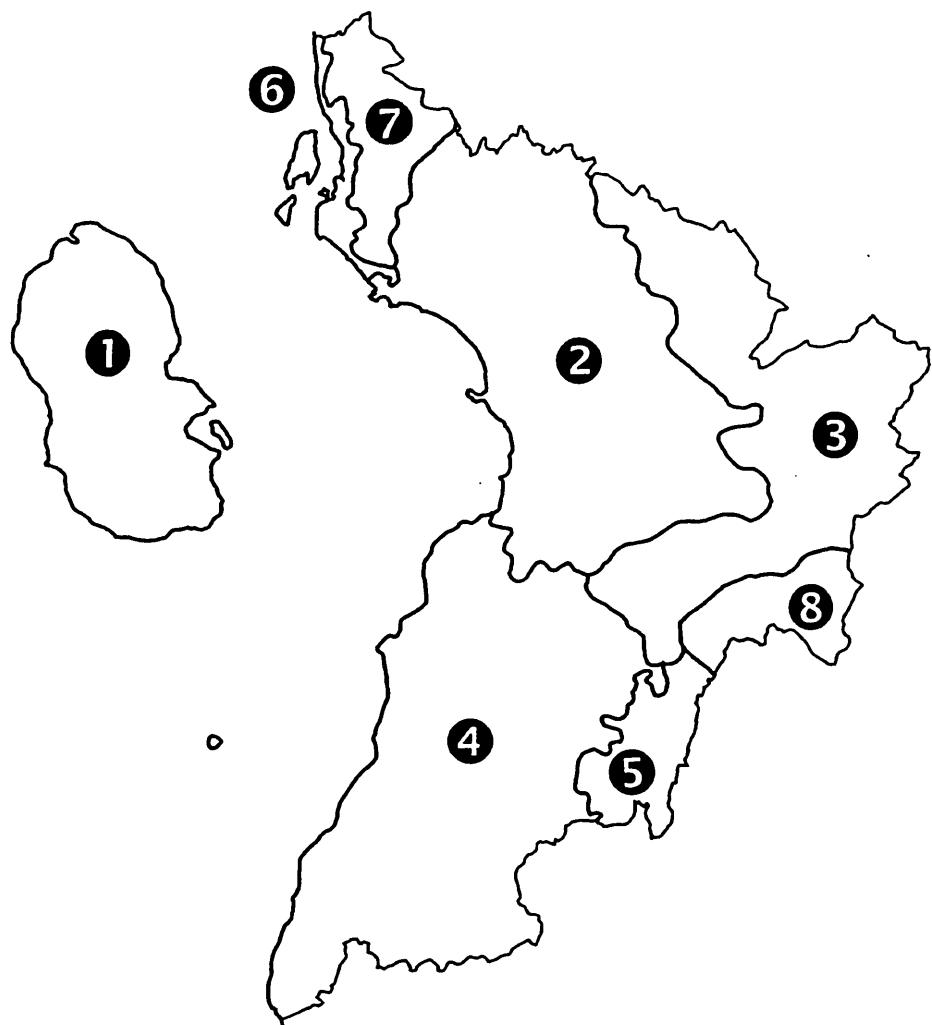
Differences in landscape character reflect both physical and historical or cultural influences including geology, drainage, landform, landcover and land use. Each of these landscape types has a distinct and relatively homogeneous character. There are, of course, subtle differences within each of the landscape types, some of which are referred to in the descriptions. It should be noted that the descriptions of landscape types are generalised and that the boundaries between types (illustrated in **Figure 13** at the back of this report), often indicate transitions rather than marked changes on the ground. This is particularly the case in lowland areas where changes in relief (often a major direct or indirect influence on landscape character) tend to be more subtle. The bulk of the analysis and description for this study related to landscape types. However, there is also reference, where appropriate, to landscape units (described in point (iii) below). Landscape types are usually given generic names reflecting their key characteristics (e.g. Lowland Hills). A given landscape type may occur in more than one regional character area, though one would expect regional factors to influence its character;

- (iii) **Landscape units** are discrete geographic areas of relatively uniform character, which fall within particular landscape types. In one regional character area, the same landscape type may occur in a number of different landscape units.

## Regional Character Areas

- 5.5. This section of the report describes the Regional Character Areas (RCAs) that may be identified in Ayrshire. An analysis of RCAs has been included for two principal reasons.
- Firstly, an overview of the broad variations in patterns of landscape character contributes to the identification of Regional Character Areas across Scotland as a whole. While it would be possible to do this on the basis of the more detailed landscape character types alone, the use of RCAs can assist in the identification and description of the overall distribution of character types across the country.
  - Secondly, the RCAs can provide a strategic overview of landscape character for a particular area, thereby informing the preparation of strategic planning and management policies. Rather than focusing solely on those areas which are regarded as regionally or nationally important, the description of RCAs provides a common baseline on which to base policy and consider forces for change. Therefore, rather than concentrating attention on designated landscapes, the use of RCAs can help ensure that policies are designed to conserve or enhance landscape character in all areas. This forms the basis of a sustainable approach to landscape planning.
- 5.6. Eight RCAs have been identified (see **Figure 9** opposite). It will be appreciated that several of these areas extend well beyond the boundaries of Ayrshire. The Regional Character Areas, and the key landscape issues affecting them are described below:

## AYRSHIRE REGIONAL CHARACTER AREAS



- ① Arran
- ② Ayrshire basin
- ③ Ayrshire Rim
- ④ Carrick Hills and Valleys
- ⑤ Galloway Uplands
- ⑥ Inner Firth of Clyde
- ⑦ Renfrew Heights
- ⑧ Southern Uplands

Figure 9

(i) **Arran:** Lying in the outer part of the Firth of Clyde, the island of Arran is perhaps the most contradictory of Regional Character Areas. On the one hand, its island status, and popularity, mean that Arran is recognised as a landscape in its own right. On the other hand, as guide books frequently describe, the detailed landscape is very varied, representing Scotland in miniature. In part this reflects the island's geological structure and, in particular, the Highland Boundary Fault which cuts the island in two. The northern part of Arran comprises a dramatic landscape of heavily glaciated granitic peaks and valleys, while the southern part comprises lower and more subdued moorlands. A settled and pastoral fringe runs around the island above the raised beaches and clifflines along the coast. The east side of the island is generally more sheltered, wooded and settled than the more exposed and remote western coast. The island is rich in archaeological sites.

Key landscape issues include:

- development pressures associated with principal settlements;
- recreation pressures;
- woodland and forestry management;
- conservation of distinctive agricultural landscapes.

(ii) **Ayrshire Basin:** The Ayrshire basin comprises the extensive semi-circle of lowland focused on the county town of Ayr. The area is bounded to the north by the Renfrew heights, and to the east and south by the Ayrshire Rim and Carrick Hills and Valleys. The basin varies in elevation, draining from east to west. However, it is the pattern of land use and settlement which provides the area's distinctive character. Compared with surrounding areas, the Ayrshire basin is heavily populated with a dense network of settlements and roads. The principal land use is dairy farming, resulting in the survival of the framework of hedges and hedgerow trees. The basin is cut by a series of narrow river valleys which have become incised as the land has risen relative to the sea.

Key landscape issues include:

- issues to do with past and future settlement expansion, including:
  - visual effects of past expansion;
  - nature of the urban fringe;
  - settlement coalescence;
  - pressure for expansion of larger settlements;
  - pressure for expansion of smaller settlements;
  - issue of settlement capacity and landscape capacity;
  - building design, materials, siting, layout and orientation;

- conservation and restoration of rich lowland agricultural landscape including:
    - hedges and other field boundaries;
    - tree lines, avenues and clumps;
    - minor roads;
    - vernacular farmsteads and sympathetic newer structures;
  - coastal pressures including:
    - recreational development pressure;
    - coastal defence;
    - climate change.
- (iii) **Ayrshire Rim:** Enclosing the Ayrshire Basin to the east and south is the Ayrshire Rim, an extensive area of plateau moorland to the north of the Southern Uplands Fault and extending east into Lanarkshire. The hills are broad and often shallow sloped, comprising areas of moss and blanket bog. Large areas are afforested with coniferous plantations. Settlement is focused in the series of upland river valleys which cut through the hills, often providing a corridor for communication. The presence of coal-bearing rocks is reflected in the history of industrial development, particularly in the south eastern part of the area.
- Key landscape issues include:
- conservation of remote, upland character;
  - pressures for forestry expansion;
  - pressures for continued open-cast coal working with issues including:
    - site selection;
    - visual and landscape impact;
    - effective restoration and viable afteruse;
  - setting of settlements in the landscape, particularly in valleys;
  - building design, materials, siting, layout and orientation;
  - potential for wind farm development;
  - future of declining industrial settlements;
  - integration of transport corridors.

(iv) **Carrick Hills and Valleys:** The south west part of Ayrshire comprises a complex area of hills and valleys, forming an area of transition between the higher ground of Dumfries and Galloway and the lowlands of the Ayrshire Basin. Geological factors have had a profound influence on the structure of the landscape. In particular, the Southern Uplands Fault, and a series of lesser parallel faultlines, running from southwest to northeast has determined the alignment of a series of valleys and ridgelines. Valleys tend to be small scale, settled and pastoral in character, while intervening hills comprise moorland and forestry. The coastline is dominated by a raised beach landscape, punctuated by a series of coastal headlands.

Key landscape issues include:

- conservation of upland character of hills and pastoral, settled character of valleys;
- appropriate balance of forestry and open land;
- potential for wind farm development.

(v) **Galloway Uplands:** The Galloway Uplands, as the name suggests, comprises part of a larger Regional Character Area which extends into Dumfries and Galloway. The area is dominated by an intrusion of granite which has been subject to differential erosion, leaving a series of hills and lochs surrounded by a ring of outer summits. The area is characterised by its relatively rugged and wild topography, although a large part falls within the Galloway Forest Park.

Key landscape issues include:

- conservation of remote, upland character;
- pressures for forestry expansion and concerns about appropriate balance of forestry and open land;
- maintenance of upland agricultural economy;

(vi) **Inner Firth of Clyde:** Although comprising only a small part of the study area, the Inner Firth of Clyde comprises a distinctive regional character area, characterised by medium distance views across semi-sheltered water to steeply rising shorelines, often backed by wooded slopes. Many of the coastal fringes are settled. It is a constantly changing landscape reflecting changing light and weather. The combination of settled and unsettled coastlines, open water, pleasure craft and commercial shipping gives this area a distinctive character.

Key landscape issues include:

- pressure for urban development and expansion in constrained locations;
- recreation pressures;
- woodland management.

(vii) **Renfrew Heights:** In the northern part of Ayrshire, between the Firth of Clyde near Largs and Wemys Bay and the Gourock Valley lies a distinctive range of hills, broadening from a narrow point near Ardrossan to a broad area of moorland overlooking the Clyde above Greenock. Largely unsettled, but with a rich legacy of historic sites, these hills comprise the Renfrew Heights.

Key landscape issues include:

- maintenance of a viable upland farming economy;
- conservation of historic sites;
- effects of tall structures including pylons.

(viii) **Southern Uplands:** Lying to the south of the Southern Upland Boundary Fault, this Regional Character Area covers a large part of Dumfries and Galloway, but a relatively limited area of Ayrshire. The underlying geology is predominantly Ordovician and Silurian greywackes and shales. The area is characterised by smooth conical peaks with extensive foothills and plateaux. Forestry and upland sheep farm are the principal land uses, though cattle are also found in U-shaped valleys such as that of the Afton Water near New Cumnock.

Key landscape issues include:

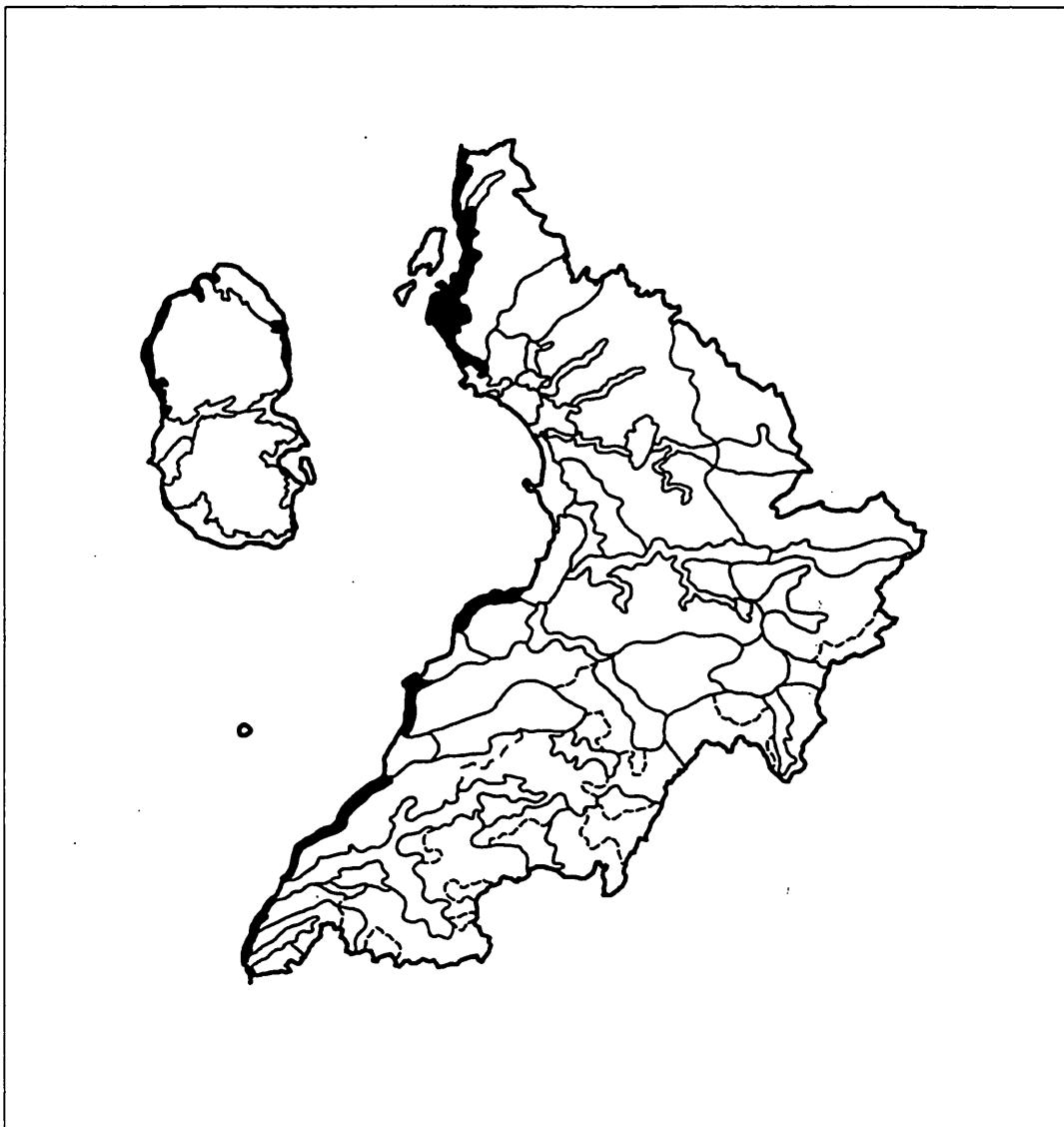
- conservation of remote, upland character;
- pressures for forestry expansion;
- maintenance of upland agricultural economy;
- potential for wind farm development.

## LANDSCAPE CLASSIFICATION

5.7. The following sections describe landscape character areas and individual landscape units. A matrix summarising the key management priorities across the landscape types is included as Appendix 2.



## A: RAISED BEACH COAST



- 5.8. Post-glacial sea-level changes have left a raised beach which comprises an important feature of the Ayrshire coast, both along the mainland and on islands within the Firth of Clyde, particularly Arran. This landscape type occurs where areas of higher ground reach the coast and where the raised beach is visible as a level shelf backed by a steep, sometimes craggy escarpment, representing the former cliff-line. Thus, although termed 'raised beach', this landscape type comprises the former beach, cliff and areas above. Although raised beaches do occur within the lowland areas, they are less significant as landscape features in their own right.
- 5.9. For the most part, the raised beach has been carved into comparatively soft red sandstone, creating a level terrace 100 to 300 metres wide a little above high water level, backed by a steep, fairly smooth escarpment. Where harder volcanic rock reach the coast, however, as at the Heads of Ayr, and south of Girvan, the cliffs remain as rocky crags and the former beach is often much narrower. Above this lies more gently rising land, grading into the moorland higher up.

- 5.10. South of Hunterston, the raised beach widens, forming an area of coastal lowland between the main area of upland to the east and an outlier (Goldenberry Hill 140 metres AOD) to the west. This hill would once have stood as an island. At Portencross the raised beach and cliffline are particularly evident. Amongst the most dramatic of former cliffs are the steep hills which rise along the north Ayrshire coast near Largs. This wall of hills forms an escarpment, providing a dramatic setting for Largs and designed landscapes such as Kelburn.
- 5.11. Raised beaches are evident along much of the Arran coastline. They are particularly prominent on the more exposed western coast north of Machrie Moor, and on the eastern coast between Brodick and the Cock of Arran. The raised beaches and old cliff lines are cut into a wide range of different rock types, including new and old red sandstones, schists, and carboniferous rocks. In places, the schists create a complex and folded coastal landscape of crags and cliffs. The steep slopes of the old cliffs either remain as craggy escarpments, or are clothed in rich, but dramatically wind-sheared broadleaf woodland. The beaches broaden into wider bays where valleys reach the coast, often providing a focus for settlement. In other areas, particularly where hills rise steeply from the coast, the raised beaches provide a level terrace for agriculture, settlement and communication. Elsewhere, grazing is possible on slopes above the old cliff-line.
- 5.12. Raised beach areas vary in land use, but are mainly farmed. While some of the narrowest or more exposed sections are not viable, elsewhere the raised beach provides some of the most productive agricultural land in Ayrshire, supporting, for example, potato cultivation. In the north, the steep escarpment slope is invariably clothed in rich, broadleaf woodland (dominated by beech) with dramatically wind sheared canopies. In the south, the coast is more exposed and the cliffline is either unvegetated or colonised by rough grassland or gorse.
- 5.13. The raised beaches probably provided fertile areas for the earliest forms of settlement in the area, though nothing survives today. The defensive nature of this coastal landscape and the importance of the raised beaches in providing a corridor for communications are reflected in the presence of a number of hillforts and castles. Examples of the former include one immediately north of Largs, the fort and dun on the hill above Portencross, and a site on Dow Hill to the south of Girvan. Castles include the Old Castle at Knock (17C), Portencross Castle (14C), Dunure Castle (15C) and Carlton Castle, Lendalfoot (15C). Several of these historic sites formed the centre of later designed landscapes (eg. Knock Castle), adding richness to the wooded landscape. Other examples include Skelmorie Castle and Kelburn Castle.
- 5.14. In subsequent centuries, historic settlements such as Largs have expanded beyond their original sites and have spread along the narrow sections of raised beach. Elsewhere (notably south of Ayr) this area has come under pressure from caravan and holiday parks. The southern sections of raised beach are relatively remote and development pressures appear to be less. Most settlements here are small and functional. One exception is Carleton near Lendalfoot where a string of wooden houses creates an informal settlement on the site of a former fishery. On Arran, the raised beach areas are characterised by narrow, linear villages such as Corrie and Pirnmill, and larger bay settlements such as Lochranza.

- 5.15. Historically, building materials reflected the local geology. At Largs, for example, red sandstone is a common stone, reflected both in tenement buildings and in grander structures such as churches. On the volcanic coast south of Ayr, buildings are built of grey stone or are rendered and limewashed. On Arran, building materials closely reflect variations in local geology. Many buildings are limewashed. Modern development uses a wide range of materials and styles, few of which have local origins. Despite the elevated nature of the raised cliff-line, tall structures such as masts are relatively few. The principal exception is at Hunterston where structures associated with the coal terminal, and the pylons serving the power station can be prominent features. Extensive screen bunding means that the local impact of the coal terminal is very limited.
- 5.16. More extensive landscape impacts are associated with the on-going programme of road improvements, particularly along the A77(T) between Girvan and Ballantrae. Here the road runs along the narrow raised beach at the foot of the hard volcanic cliffs. Over a period of years the once winding coastal road has been straightened and upgraded. This has involved the creation of new rock cuttings and the loss of small headlands and other important local features. Old sections of road remain as lay-bys and picnic areas.

### **Forces for change**

- 5.17. In this section we describe the principal types of change that have affected the Raised Beach Coast landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.18. **Agriculture:** The broader sections of raised beach, for example between Largs and Ardrossan, provide some of the most productive agricultural land in Ayrshire. In some of the narrower sections, particularly where land has become fragmented or developed, the raised beach is less intensively used, due to the relatively high costs of farming small areas. Alternatively, activities such as nurseries have developed, balancing high costs with high returns.
- 5.19. **Woodland:** Large parts of the former cliffline are characterised by dense, often wind sheared broadleaf woodland. While much of this is semi-natural in origin, some is associated with designed landscapes and large estates. Woodland management is required to ensure that these woodlands continue to form a characteristic feature of this landscape type. In some of the more exposed sections of raised beach (e.g. north of Girvan) these woodlands give way to areas of scrub, often dominated by gorse.
- 5.20. **Development:** Historically some sections of raised beach coast have come under pressure as towns such as Largs and Girvan have expanded out of their valley locations, and housing or other types of development have spread along the coastal strip. While small, historic settlements (such as Portencross) can sit comfortably against the steep former cliffline, some the 20th century growth has taken the form of ribbon development along the coastal road. This has the effect of extending urban areas' influence along the coast, and weakens the distinctive character of the raised beach landscape type.

- 5.21. **Recreation:** Since this landscape type accounts for much of the coastline in Ayrshire and on Arran, a certain amount of recreation pressure might be expected. In general, formal recreation developments have tended to be concentrated in or around the main coastal towns in the area and provision along the sections of raised beach coast tends to be of an informal nature, comprising lay-bys and parking areas, sometime formed from redundant sections of the coast road. South of Ayr lie a number of caravan parks and holiday parks, some comprising a form of farm diversification, while at Lendalfoot a string of holiday cabins has developed at the foot of the former cliffline.
- 5.22. **Transport:** Historically, the raised beaches have provided a corridor for road communications. On Arran, for example, a road runs along most of the raised beach coast. South of Ayr, the A77, providing a principal route between Glasgow, Ayrshire and Stranraer runs along the coast. Recent years have seen a programme of improvements designed to bring the road up to modern design standards. Often, this has taken the form of engineering works to improve the vertical or horizontal alignment. In a number of locations, this has resulted in the creation of new rock cuttings and the considerable modification of local landscape features associated with the former cliffline. Although there may be benefits for road users, these improvements have sometimes resulted in the weakening of landscape character and created a road that is out of scale with the narrower sections of raised beach.
- 5.23. **Minerals:** The only significant mineral related development affecting this landscape type is the ore terminal at Hunterston. At a local scale, considerable screening and landscaping works mean that the visual impact of this facility is very limited. Within the broader landscape, the scale of the terminal, including extensive storage areas, means that it can be more widely visible. Elsewhere, there is evidence of small disused quarries in places along the raised beach landscape, probably created to provide sources of local building stone. While these are not of a scale to have a noticeable impact on the landscape, the former cliffline would be very sensitive to more extensive mineral working.
- 5.24. **Wind power:** The former cliffline associated with the raised beach landscape may have technical potential for wind power developments. Since much of the coast is visible from other parts of the area, including from Arran, it is important that wind farm proposals in such areas are very carefully designed and assessed.
- 5.25. **Climate change:** The raised beach landscapes of Ayrshire are the product of historic phases of climate change and sea level change. Increasing storminess, or a rise in sea level could have an adverse effect in terms of coastal erosion and the need for coastal defence works.

## **Management and Planning Guidelines**

- 5.26. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve and maintain the predominantly small scale, agricultural nature of this landscape type, and to retain the integrity of the related landform features.**

## **Agriculture**

- support initiatives to bring abandoned or underused farmland back into production, though considering carefully the development and visual intensification that often accompanies uses such as nurseries, market gardens, etc;
- where there has been decline or loss in the past, particularly in areas used for arable production, reinstate hedgerows through replacement of post and wire fencing and future hedgerow maintenance;
- where they occur, stone wall field boundaries should be protected and maintained; priority should be placed on those adjacent to and highly visible from the main coast roads.
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

## **Forestry and Woodland**

- support semi-natural and broadleaf woodland management and new broadleaf planting schemes in recognition of the important contribution of these woods to the raised beach landscape;
- use new planting to create a framework to absorb earlier development in the open countryside and other visually intrusive features;
- in locations such as Kelburn and Knock Castles, support and encourage policy woodland management in order to maintain the character of designed landscapes;
- enhance parkland feel where appropriate through small scale woodland planting;
- large scale coniferous forestry is inappropriate in this landscape type, new planting inland should not impinge upon the coast;
- new planting should conform to the Forestry Authority's design guidelines. In particular, it should respond to the small to medium scale nature of the landscape, the importance of views along the raised beach and historic and ecological values;
- consider opportunities for new broadleaf woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the relative importance of different areas of existing woodland and how this would be influenced by an increase in woodland cover;
  - the importance of key views and features within the landscape;
  - opportunities for provide screening and shelter;
  - opportunities to link isolated areas of woodland.
- As a general principal, new woodland should be concentrated on steeper slopes, avoiding the flat corridor except where it provides screening or shelter.

### ***Recreation***

- address urgently the landscape impact of existing caravan parks and theme parks on the raised beach by encouraging more effective screening;
- limit the visual impact of further developments by steering them to existing settlements favouring less visible or better screened locations and requiring screen planting using local tree species;
- while recognising the need for commercial signage, encourage a sensitive and coordinated approach, perhaps extending use of the 'brown sign system';
- support small scale, low-key tourism or recreational development;
- tourism development and facilities should be sited to avoid unchecked linear development or development which sits uncomfortably in the landscape.

### ***Development***

- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include:
  - gateways and approaches;
  - key vistas and views;
  - landmark features;
  - new buildings which address surrounding areas;
  - screen planting.
- discourage isolated developments in the more open parts of the raised beach landscape;
- new development should reinforce the existing settlement patterns. Further linear developments should, however, be resisted;
- discourage the simplistic grafting of housing estates or individual buildings onto the edge of settlements. Encourage more imaginative schemes which respond to the existing patterns of layout, structure, massing and scale;
- there is great variety in building materials and styles reflecting variations in local stone (e.g. old red sandstone, basalts and schists) and settlement character (e.g. port, holiday, agriculture or industry) though much 20th century development has adopted standard designs using imported materials. Encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles.  
Avoid standard designs and layouts;
- consider the preparation of urban development plans and design guides as supplementary planning guidance;

- changes in agricultural practice along the raised beach coast mean that some farm buildings are redundant or underused. These often make an important contribution to landscape character and reflect the use of local stone and traditional design. Conversion (e.g. to residential use) can help ensure their survival. However, it is important that they are not upgraded to the extent that the original character of the buildings is lost and unduly urban or suburban features are introduced into the landscape;
- there should be a general presumption against large scale built developments within this generally small scale landscape;
- discourage roadside developments in the open countryside.

#### ***Tall Structures***

- assess any proposals for aerials or masts in terms of their visual and landscape impact;
- encourage telecommunications companies to share facilities where it is evident that this would reduce the overall landscape impact;
- develop a regional strategy for renewable energy, including wind power, in order that the most appropriate types of development and areas come forward;
- this area should be considered as a low priority for wind farm development on landscape character and visibility grounds;
- any wind power developments on adjacent higher ground should avoid skylining when viewed from the coastal towns and main roads;
- underground cable solutions should be considered in preference to pylon lines. This is particularly the case in relation to the pylons serving Hunterston which represent a major landscape feature on the raised beach and neighbouring landscape types.

#### ***Transport***

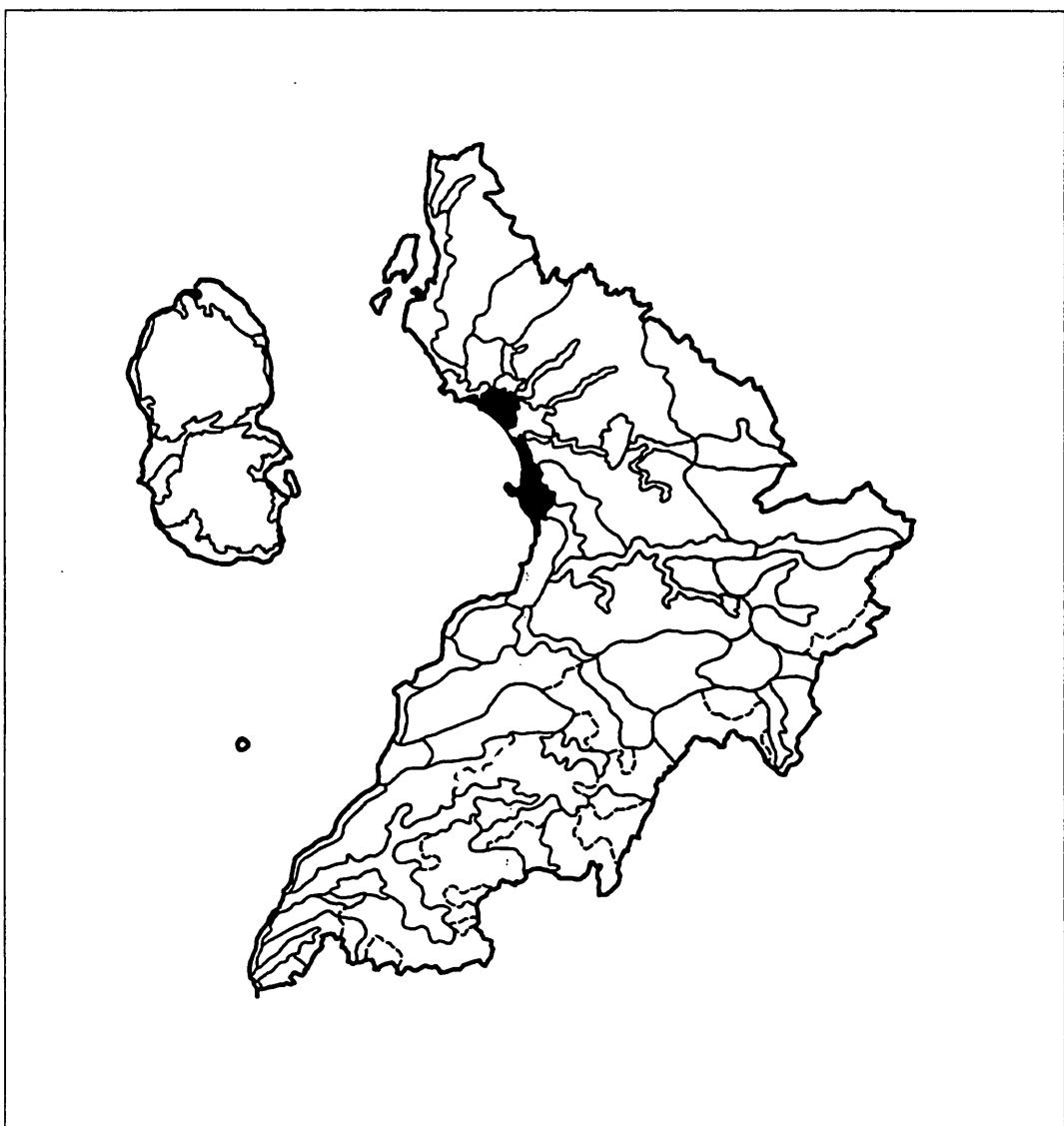
- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape. The conservation or reinstatement of roadside walls and hedgerows is an important requirement for this landscape type;
- ensure road engineering works preserve the informal character of the coastal road and provide integration with the local landscape by extending new sections of road. Design should also take into account perception of the small scale, raised beach landscape and, in particular, the impact of the introduction of a large scale, straightened and fast road upon receptors, including travellers.
- minimise upgrading or improvement of roads, particularly where this involves the creation of cuttings and embankments, the loss of characteristic rock outcrops, or the introduction of additional signage, road paint or features such as concrete kerbing;
- encourage on-site and off-site planting to better integrate major roads into the landscape and to provide screening of traffic;

- where road improvement schemes take place, ensure that drystone walls, hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated;
- develop a road use hierarchy as a basis for management;
- avoid the use of suburban features such as concrete kerbing in a rural setting unless absolutely necessary. Explore more appropriate alternatives.

#### ***Climate change***

- assess any options for coastal management in a comprehensive way reflecting the dynamic and interdependent nature of the processes of erosion and deposition along the coast.

## B LOWLAND COAST



- 5.27. Within the Ayrshire basin, between Ardrossan in the north and Ayr in the south, the coast is marked by an area of lowland, much of it comprising wind blown sand. Two rounded bays have been formed within the larger bay with sandy beaches backed by areas of sand dune, separated by low headlands where harder igneous rocks reach the coast. A complex estuarine landscape is found where the rivers Irvine and Garnock meet at the coast, forming a natural harbour, sheltered behind Irvine Bar.
- 5.28. Natural dune vegetation and landscapes within this area are few and are of ecological importance due to their scarcity. The spit north of Ayr includes an area of surviving dunes, though even here industry, sand and gravel working and plantations of Scots pine have reduced the extent of the natural landscape. However, several of the golf-courses are of nature conservation importance, an example being Western Gailes Golf-Course, designated as an SSSI.

- 5.29. The growth of coastal settlements such as Ayr, Prestwick, Troon, Irvine, Stevenston, Saltcoats and Ardrossan means that much of the coastal lowland has been lost. Remnant sections are influenced by the presence of roads and railways, and have been further modified both by recreational development, particularly golf-courses, and industrial and commercial developments. Although undeveloped areas remain, the density of urban development and the contrast with less settled areas around are such as to influence perceptions of the coastal lowland. Continued development pressures, together with tidal defence issues affect these areas.

### **Forces for change**

- 5.30. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.31. **Woodland:** Though predominantly open landscapes, comprising natural or managed dune systems, these areas include a number of stands of mature Scots pine, providing shelter and screening.
- 5.32. **Development:** The growth of settlements between Ayr and Ardrossan has placed tremendous pressure on these sections of coast. Considerable areas have been lost to urban expansion, while most undeveloped areas have been reclaimed for formal recreation, particularly golf. Even within the undeveloped areas (for instance to the north of Irvine) there has been considerable industrial development. Remaining areas of natural dunes continue to experience development pressure.
- 5.33. **Recreation:** As noted in the previous paragraph, a large proportion of the undeveloped coast has been turned into golf-courses, or formal recreation areas such as that on the seafront at Irvine. There is considerable opportunity to create more naturalistic conditions in parts of these golf-courses, bringing benefits for nature conservation and the landscape.
- 5.34. **Climate change:** In such circumstances, policy responses may range from the use of 'hard' coastal defences to prevent erosion or inundation to 'softer' responses which accept the loss of some areas to the sea. From a landscape and nature conservation perspective, softer responses are likely to be favoured since these result in more natural coastal landscapes, place less pressure on important intertidal areas and are less likely to result in unanticipated responses elsewhere along the coast. However, it is recognised that, given the developed nature of much of the coast, a harder response is more likely in many cases.

## **Management and Planning Guidelines**

- 5.35. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve remaining areas of undeveloped coast, and restore or enhance areas which are used for formal recreation.**

### ***Agriculture***

- encourage the continuation of appropriate levels of grazing on the vegetated dunes and dune slack areas;
- discourage agricultural improvements;
- maintain present 'untamed' nature of landscape.

### ***Forestry and Woodland***

- discourage woodland planting within this landscape type.

### ***Recreation***

- maintain low-key level of provision in previously undeveloped areas;
- encourage and support changes to golf-course management regimes which can enhance nature conservation and landscape values. The reintroduction of more naturalistic plant communities in adjacent improved grasslands should also be encouraged;
- monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary;
- support small scale, low-key recreational provision.

### ***Development***

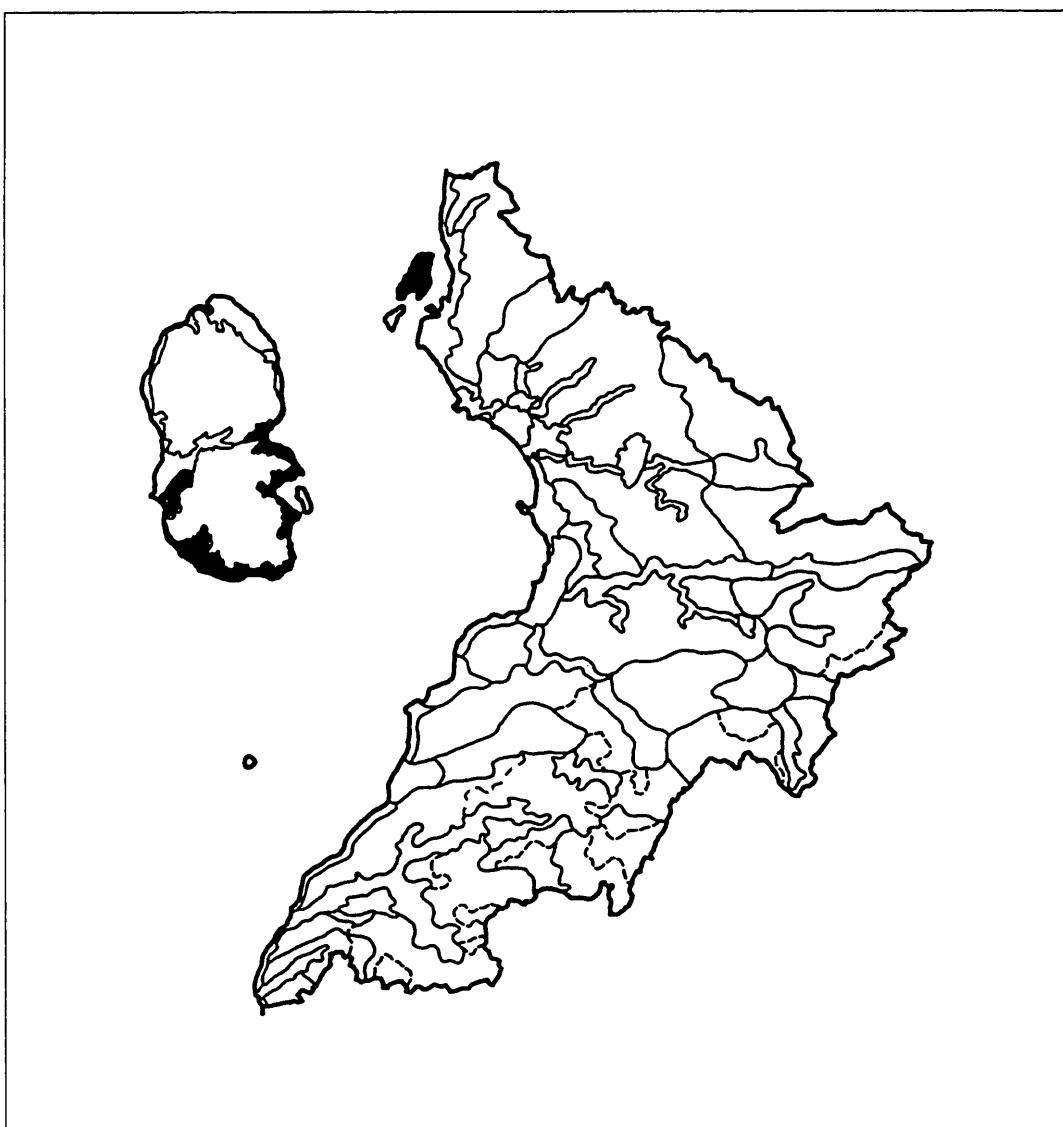
- additional loss of this landscape type should be avoided. New development in these areas is, therefore, inappropriate.

### ***Climate change***

- assess any options for coastal management in a comprehensive way reflecting the dynamic and interdependent nature of the processes of erosion and deposition along the coast. Where practical, favour 'softer' coastal management solutions such as managed retreat;
- monitor the effects of climate change on the stability of the sandy coast.
-



## C: COASTAL FRINGE WITH AGRICULTURE



- 5.36. The Coastal Fringe with Agriculture landscape type occurs on the islands of Great and Little Cumbrae, and on Arran.
- 5.37. Although there are strong local variations in the landscape character of the Cumbraes, it is not appropriate to identify detailed landscape types at the level of a regional assessment. Great Cumbrae, as the name suggests, is larger, and more settled with much of the island given over to improved pasture and smaller areas (mainly steeper slopes) under deciduous woodland or heather moorland. The settlement of Millport is strung along a bay along the south of the island. Little Cumbrae, by contrast, is more rugged, sharing the geology of the hills above Largs. Settlement is absent and agricultural activity limited to rough grazing.

- 5.38. While the Isle of Arran is dominated by the mountain and moorland interior, a lowland fringe runs south around the coast between Brodick and Machrie Moor, incorporating some areas of raised beach, and broadening wherever valleys reach the coast. The agricultural land capability of these areas was sufficient to allow improvements, including enclosure, to take place during the 18th and 19th centuries, creating a fringe of small, geometric and usually hedged fields which extends round much of the southern part of the island. The density of place names reflects the fact that these are the most settled parts of the island, with many farmhouses and cottages. Many are thought to date back many centuries, conforming to the pattern that prevailed across much of Ayrshire, though the old field systems have been lost beneath the more recent enclosures. More recent settlement has focused on the west coast at Brodick and Lamlash, where historic cores, supplemented by Victorian additions, have been expanded by the development of suburban housing, pushing along the coast and uphill. Recreational developments, including golf-courses and caravan sites further this suburbanisation of the western part of the coastal fringe. Elsewhere, some of the networks of field boundaries are beginning to deteriorate, probably assisted by westerly gales.

## Forces for change

- 5.39. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.40. **Agriculture:** Farming in this landscape type is more vulnerable to change than on the mainland, due in part to island status, but also in reflection of the particular pressures for residential and recreational development, particularly on the east coast. The more marginal nature of the farming economy, together with the influence of exposure, is reflected in the deterioration of hedges in some places, and their replacement with post and wire fences.
- 5.41. **Woodland:** The patterns of broadleaf woodland in this landscape reflect closely the interplay of topography and exposure, together with the influence of human land use. The semi-natural woodland of oak and birch found in many of the upland valleys, tends to give way to introduced species such as beech in the lower more sheltered parts of the valley. The transition in woodland types often coincides with the change from unenclosed to enclosed land. Management and conservation of this broadleaf woodland, where it occurs, is important if the character of the coastal farmland is to be maintained.
- 5.42. **Development:** Settlements such as Brodick, Lamlash and to a lesser extent Millport, have experienced considerable growth during the present century. Vernacular designs, or even Victorian interpretations of them, have been abandoned in favour of standard suburban designs common to developments all over Britain. The most obvious expansion has taken the form of the addition of small peripheral estates. In other areas, houses have extended along country lanes into the surrounding countryside.

- 5.43. **Recreation:** The popularity of Arran as a destination for visitors means that there has been considerable pressure for recreational development in the form of golf-courses and other formal facilities. However, this tends to have been concentrated within a limited part of the island.

### **Management and Planning Guidelines**

- 5.44. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the agricultural character of these areas, by controlling development and reinforcing the structure of field boundaries and trees.**

#### ***Agriculture***

- discourage further loss of pastures, particularly around settlements;
- discourage improvements which result in loss of field boundaries or field boundary trees;
- encourage management, including restoration, of field boundaries and field boundary trees;
- encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- enhance wildlife value through careful grazing;
- maintain pastoral landscape;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

#### ***Forestry and Woodland***

- encourage the planting of new tree lines;
- encourage small scale woodland planting;
- encourage the integration of broadleaves and conifers on a small to medium scale, prevent physical or visual encroachment of large forests;
- explore opportunities to modify management practices to allow the regeneration of native woodlands in some valleys to create a transition from the managed coastal fringe to the 'untamed' uplands;
- discourage the extension of coniferous forestry into this landscape type.

### ***Recreation***

- focus recreation activities and the provision of new facilities at existing centres. Maintain low-key level of provision in areas outside the principal settlements;
- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- ensure that proposals for expansion of facilities are subject to rigorous visual impact assessment adopting, for example, the approach set out in the guidance published by the Landscape Institute and the Institute of Environmental Assessment (1995);
- general presumption against large scale built developments;
- influence the design and provision of associated signage;
- monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary;
- site caravan parks or other facilities to avoid disrupting key views, making best use of natural or woodland screening;
- tourism development and facilities should be sited to avoid unchecked linear development or development which sits uncomfortably in the landscape.

### ***Development***

- identify potential housing sites and prepare preliminary design/development guidance;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include:
  - creating urban gateways which define the edge of settlements on road routes;
  - controlling views to and from settlements by screen planting;
  - landmark features;
  - ensuring new peripheral buildings address surrounding areas and are of high architectural quality;
  - developing only where woodland backclothing is available;
- encourage new development to re-inforce the existing settlement;
- encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles. Avoid standard designs and layouts;
- consider the preparation of design guides as supplementary planning guidance;
- discourage development in the open countryside;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments;

- where development is permitted, encourage construction to consolidate existing villages, hamlets or groups of farmbuildings, and favour sheltered locations.

### ***Tall Structures***

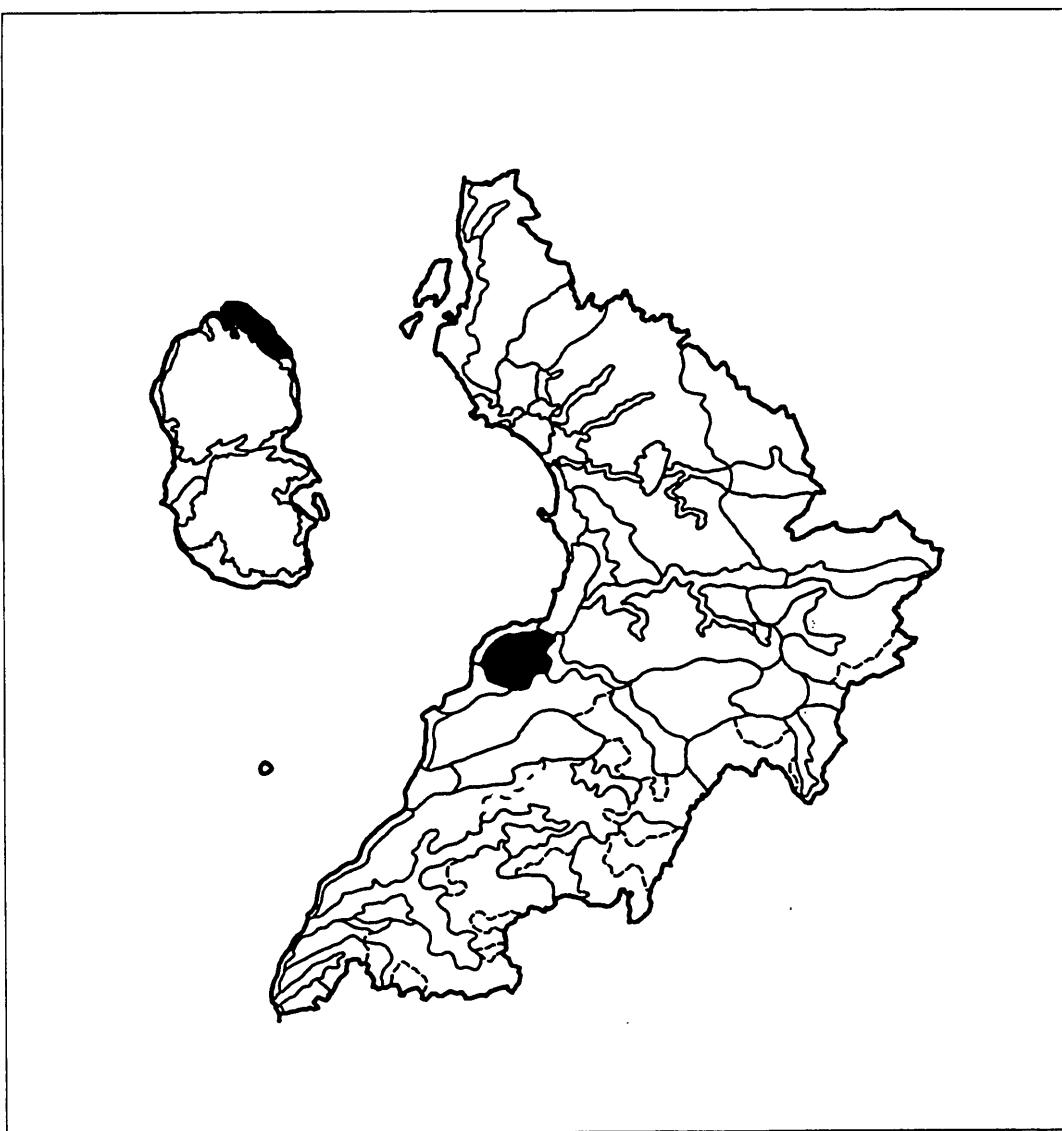
- assess any proposals for aerials, masts or tall structures in surrounding areas in terms of their visual impact on the landscape;
- this landscape type should not be considered as a suitable search area for wind farms on landscape character grounds. These areas have a small scale, rural landscape character, with settlement outwith towns such as Brodick and Millport limited to a scatter of farms. The introduction of modern, large structures such as wind turbines could conflict with the grain and scale of this landscape;

### ***Transport***

- ensure road engineering works preserve the informal character of the rural roads;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.



## D: COASTAL HEADLANDS



- 5.45. Coastal Headlands are found along the mainland coast to the south of Ayr, and on the northern part of Arran.

### **South Ayrshire Headlands**

- 5.46. To the south of Ayr lies a distinctive area of high ground (the Carrick Hills) forming a headland at the southern end of the Ayrshire bay. The hills often have fluffy, almost craggy summits, flanked to seaward by raised beaches comprising old clifflines and level coastal terraces.
- 5.47. On the lower, more sheltered slopes, enclosed pastures prevail, though this quickly gives way to rough grazing on more exposed, higher slopes. Summits are characterised by gorse and lines of outgrown field boundary trees. Semi-natural woodland is found on some of the more sheltered slopes.

- 5.48. Settlement is scarce, limited to a handful of white farmsteads on the hills' lower slopes. There are a number of communications masts, however, the three on Brown Carrick Hill often visible from much of the Ayrshire basin and beyond.

### Cock of Arran

- 5.49. On the north eastern flank of Arran stands a distinctive headland, distinguished from the rest of the upland by its differing geology and by 'The Boguille' pass which divides it from the northern slopes of the Goat Fell group. The headland comprises a combination of sandstones, carboniferous rocks and lavas. The headland is elongated, running from north-west to south-east, with a very steep northern face and more shallow south facing slopes. Although the southeasternmost part has been forested, much remains under heather or rough grassland. The settlement of Lochranza is sited around a sheltered natural harbour at the western end of the Cock of Arran. This dispersed village includes a tower house, a scatter of traditional cottages and the more recent distillery development.

### Forces for change

- 5.50. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.51. **Agriculture:** The coastal headlands tend to have a pattern of agriculture which reflects the combined influence of exposure, gradient and soil quality. Hedged fields on the lower slopes typically give way to rougher, unenclosed summits. In places, the contraction of farming is evident in the abandonment of higher enclosures and the presence of outgrown beech hedges. Management should seek to conserve the contrast between the farmed lower slopes and the rougher tops.
- 5.52. **Woodland:** A number of small to medium sized coniferous plantations are found on the coastal headlands. These are sometimes geometric in appearance, though replanting in accordance with the Forestry Authority's design guidance should lead to their improvement in due course.
- 5.53. **Development:** The headlands already provide sites for communications infrastructure. There may be continued pressure for this form of development.
- 5.54. **Wind power:** The coastal headlands along the mainland coast occupy some of the most exposed, and therefore windy, locations in Ayrshire. They may, therefore, be technically suited to wind power development. The construction of windfarms in these prominent locations would require very careful site selection and design to prevent landscape and visual effects over a considerable area.

## **Management and Planning Guidelines**

- 5.55. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve, undeveloped, these prominent coastal hill top landscapes.**

### ***Agriculture***

- maintain the pastoral nature of this landscape type, and support management of grasslands to enhance nature conservation values;
- maintain present 'untamed' nature of landscape;
- maintain present grazing patterns and upkeep of enclosures;
- support semi-natural regeneration or gorse and scrub where grazing no longer continues.

### ***Forestry and Woodland***

- the future of existing areas of coniferous plantation (e.g. Cock of Arran) should be reviewed, with the objective of reducing the extent of woodland, and improving the appearance of that which remains. Felling and replanting at the end of the current rotation should provide a suitable opportunity;
- retain and manage surviving semi-natural woodland along more sheltered sections of coast;
- maintain present 'untamed' nature of landscape, with a presumption against additional commercial forestry.

### ***Recreation***

- maintain low-key level of provision in these areas, there may, however, be a need to manage and improve parking and viewing areas at viewpoints such as on Brown Carrick Hill, though this should avoid the use of urban or suburban design solutions;
- monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary;
- caravan parks, where permitted, should be limited to less prominent lower areas, and should be screened;
- support small scale, low-key tourism or recreational development;
- tourism development and facilities should be sited to avoid unchecked linear development or development which sits uncomfortably in the landscape. Where possible, such development should be located within settlements and respecting traditional designs.

### ***Development***

- discourage isolated developments in the open landscape;
- where development is permitted, ensure that buildings are located so as to minimise their impact on the landscape (utilising any natural screening provided by the landform) and that they adopt vernacular styles, building materials and colours.

### ***Tall Structures***

- discourage additional tall structures in these prominent locations;
- encourage telecommunications companies to share facilities where this would reduce the overall landscape impact. Particular concerns relate to Brown Carrick Hills where three masts are already located and additional structures would have a disproportionate impact;
- this landscape type should not be considered as a suitable search area for wind farms on landscape character grounds.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- minimise upgrading or improvement of roads, particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- seek road engineering solutions that minimise environmental impacts and maximise environmental benefits;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.

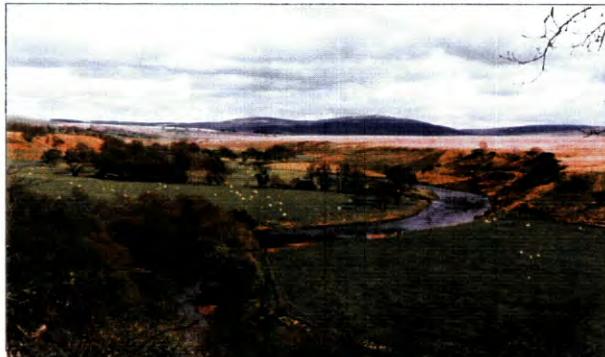
# LANDSCAPE CHARACTER TYPES



LOWLAND RIVER VALLEY: River Irvine Valley near Gatehead



INTIMATE PASTORAL VALLEY: Brisbane Glen north of Largs



UPLAND RIVER VALLEY: River Ayr Valley above Sorn



UPLAND GLEN: Valley of the Afton Water, south of New Cumnock



LOWER DALE: view south over the arable fields of the lower dale near Macrindlestone



UPLAND BASIN: view south across Upper Nith Basin towards Southern Uplands



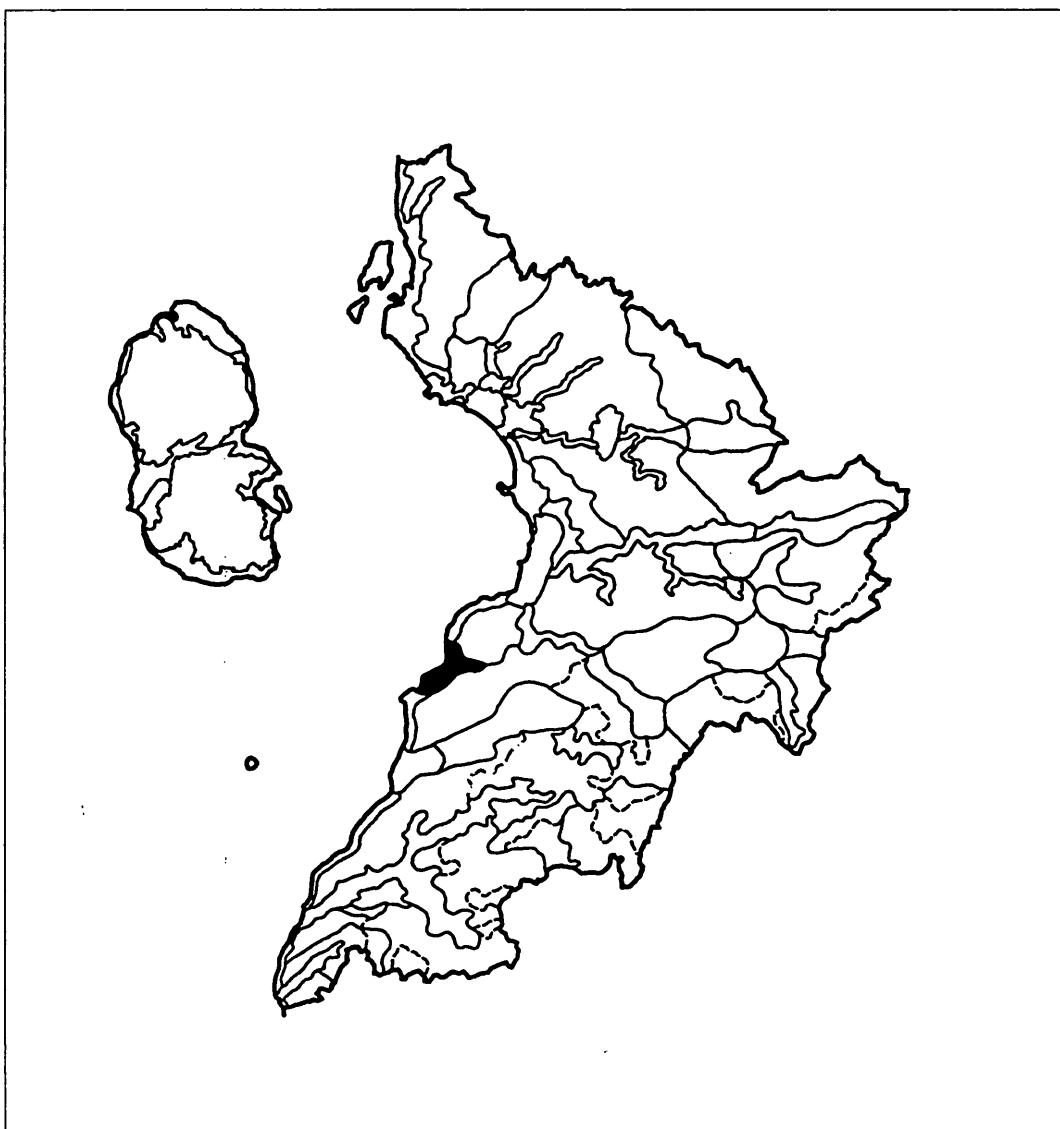
MIDDLE DALE: the pastoral character of the Middle Dale, here looking over the golf course at Brunston castle near Dailly.



LOWLAND HILLS: looking north west towards the hills near Symington



## E: COASTAL VALLEY WITH POLICIES



- 5.56. To the south of Brown Carrick Hill the softer red sandstones have been eroded by a combination of fluvial and marine erosion to form a broad, shallow coastal valley and bay enclosed by moorland hills to the north and south. The landscape is dominated by Culzean Castle, its policies woodland and farmland.
- 5.57. Landcover within the valley comprises a mosaic of arable farmland (concentrated in the lower part of the valley) pastures (on mid slopes) and broadleaf and coniferous shelter belts and woodland. Field boundaries are marked by hedges and shelterbelts.
- 5.58. As noted above, settlement is dominated by Culzean Castle which is situated above a line of low cliffs on the coast. Farms within the valley tend to be tucked into hollows or located so that they have a limited impact on the landscape. The A719 swings inland to run around the mid slopes of the valley, thereby avoiding proximity to the castle. The so-called 'Electric Brae' is located here, an optical illusion (in the past thought to have been caused by electromagnetic forces) which apparently reverses the slope of one section of the A719.

- 5.59. The combination of differing geology, the dominance of arable farming and the extensive influence of the Culzean Estate, justify the inclusion of this area as a landscape type distinct from surrounding areas.

## Forces for change

- 5.60. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.61. **Agriculture:** this is a managed agricultural landscape which shows few if any pressures.
- 5.62. **Woodland:** woodland, in a variety of forms, is an essential component of this landscape type. Continued management of the woodland, for economic and amenity purposes, is therefore important.
- 5.63. **Recreation:** two large static caravan parks are located in this landscape type; one on the coast, the other on a disused railway line a little way inland. The latter benefits from little topographic or woodland screening.

## Management and Planning Guidelines

- 5.64. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve and reinforce the policy landscape of the valley.**

### **Agriculture**

- discourage improvements which result in loss of field boundaries or field boundary trees;
- encourage replanting of trees along field boundaries;
- maintain the contrast between the arable lower valley and arable upper valley;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### **Forestry and Woodland**

- encourage a phased programme of replanting, and managing hedgerow trees, shelterbelts and other policy woodlands so as to maintain and restore the historic legacy of trees;
- encourage the planting of new tree lines along field boundaries;
- encourage the integration of broadleaves and conifers on a small to medium scale, prevent encroachment of large forests;

- encourage and support policy woodland management that can maintain the character of the designed landscapes;
- enhance parkland feel through small scale woodland planting;
- general presumption against large scale forestry on lower valley slopes.

#### ***Recreation***

- restrict additional caravan park development and explore opportunities to reduce the visual impact of existing parks, for instance by new screen planting;
- focus recreation activities and the provision of new facilities at Culzean;
- support small scale, low-key tourism or recreational development.

#### ***Development***

- discourage isolated developments in the open landscape;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens, etc.) to prevent the suburbanisation of the countryside;
- where development is permitted, ensure that buildings are located so as to minimise their impact on the landscape (utilising any natural screening provided by the landform) and that they adopt vernacular styles, building materials and colours.

#### ***Tall Structures***

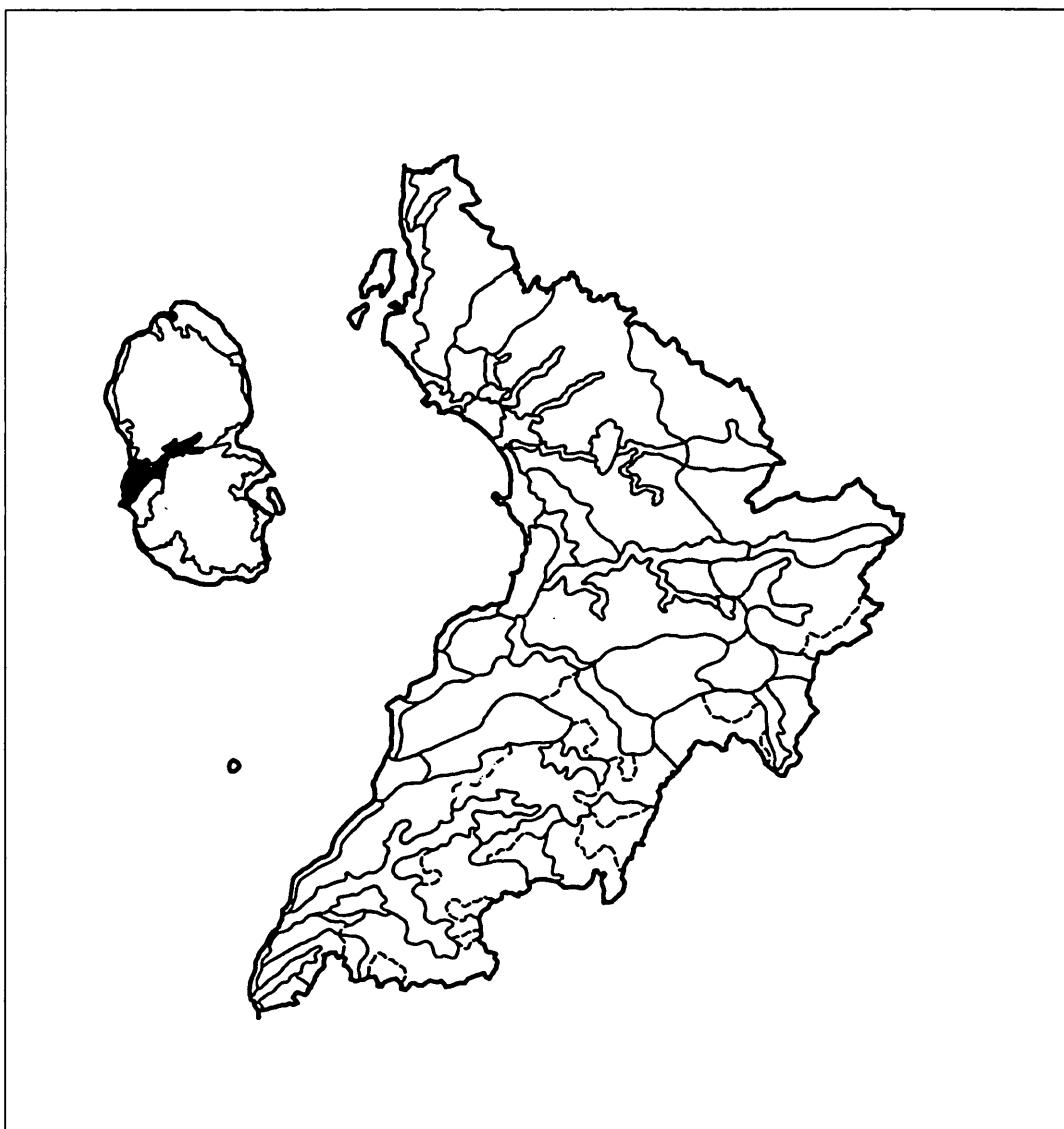
- assess any proposals for aerials, masts, or other tall structures in surrounding areas in terms of their visual impact on the valley landscape as a whole;
- this area should not be considered as a suitable search area for wind farms on landscape character grounds.

#### ***Transport***

- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- encourage on-site and off-site planting to better integrate major roads into the landscape and to provide screening of traffic;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.



## F: COASTAL LOWLAND MOOR



- 5.65. Machrie Moor in western Arran comprises an extensive area of lowland adjoining the coast north of Blackwaterfoot. It is partially enclosed by rising hills to the north and east, and the low coastal hill of Torr Righ Mor to the west. In archaeological terms, Machrie Moor comprises one of the most significant areas in Scotland, with a large number of prehistoric remains including standing stones, stone circles and cairns.
- 5.66. Although segments of the moor survive as poorly draining rough grazing, other parts were subject to enclosure, drainage and improvement, creating a tight network of geometric fields. Many of these fields are now falling out of use and wetland vegetation is recolonising and field boundaries are beginning to deteriorate. Settlement in the area comprises a dispersed scatter of houses and farms, though more recent development has taken the form of suburban estates such as the one at Ballymichael on the northern edge of the moor.

## **Forces for change**

- 5.67. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.68. **Agriculture:** though much of the area remains as unenclosed lowland moor, large areas have been enclosed and improved for agriculture in the past. Much of this land has now fallen out of agricultural use and pastures have become invaded by reeds while hedges are becoming gappy and outgrown. Given the archaeological importance of the area this decline may be appropriate.
- 5.69. **Development:** the area around Machrie Moor is characterised by a dispersed pattern of settlement. For the most part, this comprises a scatter of traditional stone farmhouses and cottages, with a few more modern houses. There are also a number of isolated cul-de-sac developments of modern suburban houses which contrast strongly with the surrounding pattern of land use and settlement.
- 5.70. **Recreation:** Machrie Moor is of particular historic interest to many visitors, raising issues about car parking provision and potential conflicts with family activities.

## **Management and Planning Guidelines**

- 5.71. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to arrest the gradual decline of agriculture while conserving the historic character of the landscape.**

### ***Agriculture***

- review the management of areas of enclosure which are now in marginal use or have been abandoned. Consider opportunities to establish alternative patterns of farming, perhaps based on low intensity methods with historic precedent and benefits in terms of landscape, archaeology and ecological interest;
- discourage improvements which involve drainage or other physical works;
- encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- enhance wildlife value through carefully controlled grazing;
- investigate the potential for encouraging herb rich meadows by limiting the use of artificial fertilisers and herbicide and careful timing of cutting;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### ***Forestry and Woodland***

- retain and manage surviving pockets of semi-natural broadleaf woodland where this is compatible with conservation of the historic environment;
- use new planting to create a framework to absorb earlier development in the open countryside, where this is compatible with the conservation of the historic environment;
- additional coniferous planting should be discouraged.

### ***Recreation***

- maintain low-key level of provision;
- address existing parking pressures associated with main sites of archaeological interest, aiming to reduce conflict with the farming community, but facilitate appropriate access and interpretation of the historic heritage;
- maintain a policy of concentrating tourist facilities within existing settlements;
- influence the design and provision of associated signage;
- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary.

### ***Development***

- encourage new development to re-inforce the existing settlement;
- discourage development of modular housing estates. Encourage more imaginative schemes which respond to the dispersed settlement layout, together with local patterns of structure, massing, scale and building materials, while allowing for modern interpretations of traditional styles;
- Consider the preparation of design guides as supplementary planning guidance;
- where development is permitted, ensure that buildings are located so as to minimise their impact on the landscape (utilising any natural screening provided by the landform) and that they adopt vernacular styles, building materials and colours.

### ***Tall Structures***

- this area should not be considered as a suitable search area for wind farms or telecommunication masts on landscape character grounds.

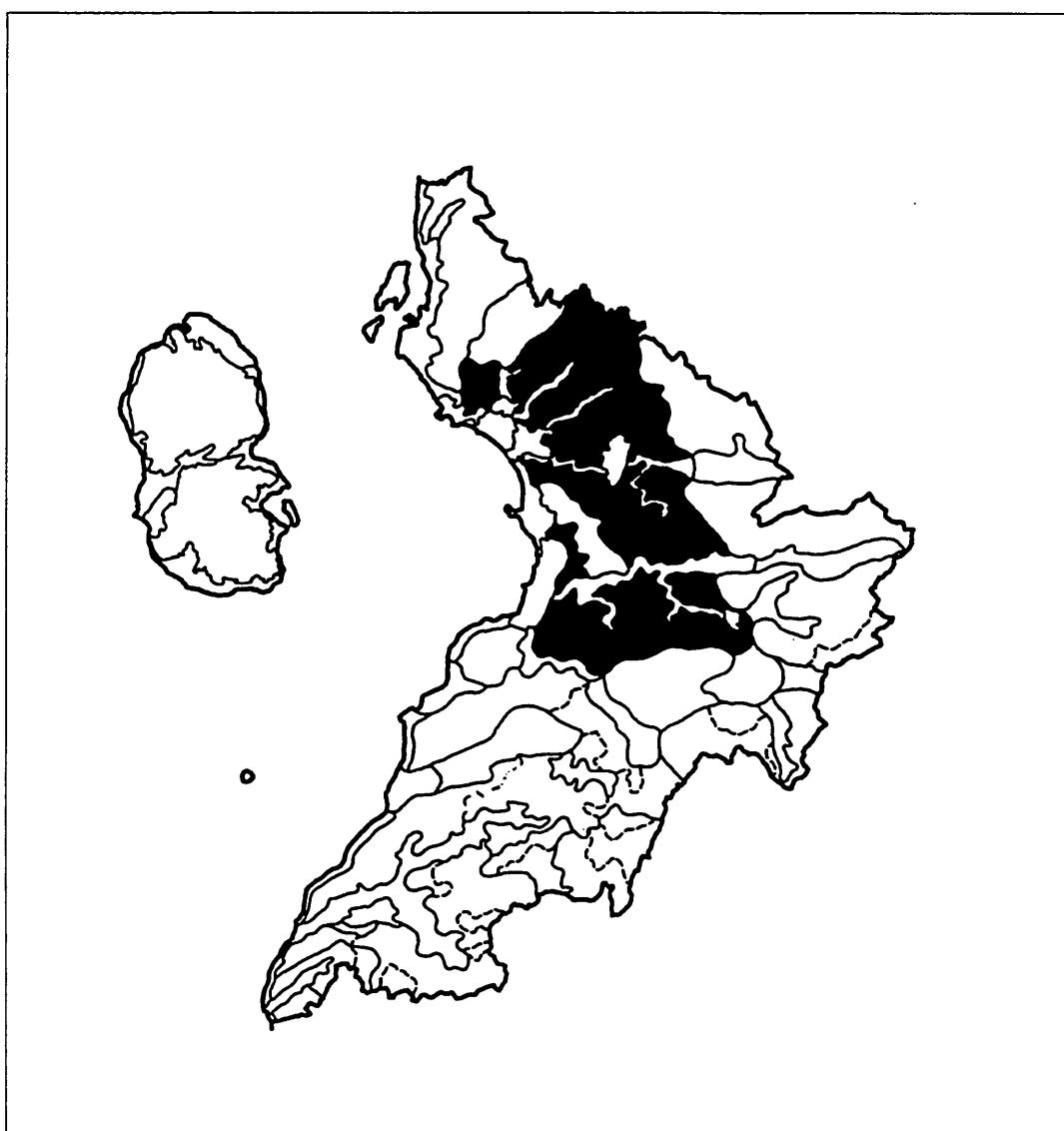
### ***Transport***

- develop a road use hierarchy as a basis for management;
- ensure road engineering works preserve the informal road network;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are conserved and, where improvement works take place, are re-instated.

### ***Climate change***

- assess any options for coastal management in a comprehensive way, reflecting the dynamic and interdependent nature of the processes of erosion and deposition along the coast.

## G: AYRSHIRE LOWLANDS



- 5.72. This landscape type forms an extensive area of agricultural lowland which occupies much of the Ayrshire basin. Lying between about 10 metres and 150 metres, the area's geology is dominated by coal measures, though basalt, sandstones, limestones, millstone grit and volcanic intrusions are also present.
- 5.73. The landform is surprisingly complex, dissected by many burns and streams draining to incised main river valleys to create an undulating lowland landscape. There is a gentle increase in height from the coastal fringe to the more abrupt transition to upland. Landcover is predominantly pastoral, though with some arable on lower and better soils. Cattle, sheep and ley grassland are common. North of Kilmarnock, a number of placenames include the term 'moss', reflecting the presence of peat bogs and mires. While many of these have been drained and reclaimed for agriculture, some areas of peatland remain.

- 5.74. Fields within this landscape type, probably dating back to the 18th or 19th century are often regular in shape and enclosed by beech or hawthorn hedges. For the most part, the hedges are in good condition, a significant asset at a time when hedgerows in many parts of the country are suffering gradual decline. Many field boundaries are also marked by mature hedgerow trees. Again, beech trees predominate. These trees give the landscape a surprisingly wooded character, often forming avenues along minor roads. In places this structure has begun to decline as trees have been felled and not replaced. More extensive woodland is limited, concentrated in river valleys and formed into shelter belts in some of the more exposed areas, or around large estates.
- 5.75. The area's settlement pattern is historic in origin. Unlike Highland areas where a system of joint-tenancy land holding prevailed, resulting in the creation of villages and hamlets, the typical lowland settlement system was based upon larger, more self contained farmsteads with a hinterland of fields. Many existing farms are on historic sites, though buildings are invariably newer and old field systems lost beneath more recent enclosures. Farms are often sited on low hill tops, typically comprising a courtyard with the farmhouse at the centre. Buildings are often limewashed with slate roofs and black painted woodwork. More modern farmbuildings, including sheds and barns are rarely intrusive, often dark red or green in colour.
- 5.76. A number of towns and villages are found throughout the lowlands, again many with medieval or earlier origins. Examples include Tarbolton and Kilmarnock. Invariably, the historic cores of such settlements are surrounded with more modern development. This often comprises standard municipal or suburban designs (white render and orange pantiles) which reflect neither the character of the historic core or the surrounding landscape.
- 5.77. The character of this landscape type shows subtle and gradual differences across the area as a whole. Variations mainly reflect topographic and geological differences, with rich pastures, enclosed by dense, well treed boundaries in the lowest parts of the basin, very slowly giving way to wetter, rushier pastures with lower hedges, fewer trees and a stronger moorland influence. At the scale of this assessment, it has not been possible to define the extremes of character as separate landscape types.

### **Forces for change**

- 5.78. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.

- 5.79. **Agriculture:** for the most part, this is a stable and prosperous farming landscape with a remarkably intact pattern of fields and hedges. In some instances the deterioration of hedges or the loss of hedgerow trees is evident, possibly signalling the process of decline which has affected many similar areas throughout the UK. It is important to prevent such change if the local character is to be maintained. As noted above, to date, most modern farm buildings have been of a scale and design which integrates well with more traditional groupings of farmhouses, barns and stables.
- 5.80. **Development:** many historic settlements, often located at bridging points in the lowland river valleys, have expanded into this landscape type. Often such growth has been incremental and apparently related more to infrastructural provision than to landscape fit. Of even greater concern is the poor integration of the urban edge with the surrounding countryside. Again, often stark suburban designs, have predominated and rarely is any form of screening provided. Under such circumstances, these expanded settlements often have quite an extensive impact on the surrounding landscape.
- 5.81. **Transport:** several major road corridors cross this landscape type, principally the A77 between Glasgow and Ayr, but also the A735, A736 and the A76. The A77 in particular has been upgraded over time and it now comprises a dual carriageway route for much of its length. There is inevitably a degree of conflict between the pastoral character of this landscape type and the presence of a major road carrying heavy traffic. There have been few successful attempts to tie the improved roads into the structure of the landscape.
- 5.82. This landscape type also contains a dense network of minor roads many of which are very rural in character. Where recent improvements have taken place, modern kerbing has sometimes been introduced at the road edge, introducing an urban feature into the rural landscape. Signage can have a similar effect. On the other hand, Ayrshire retains a large number of milestones which should be retained.

## **Management and Planning Guidelines**

- 5.83. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the high quality, pastoral landscape of the Ayrshire lowlands. Retaining the area's legacy of hedges and hedgerow trees is central to this aim.**

### ***Agriculture***

- maintain pastoral landscape;
- maintain and reinstate hedgerows and hedgerow trees;
- maintain and enhance avenues/hedgerow trees;
- discourage improvements which result in loss of field boundaries or field boundary trees;
- encourage farmers and landowners to replant trees along field boundaries, initially along roads, but also between fields;

- investigate the potential for establishing herb rich meadows to enhance the area's wildlife interest;
- encourage the conservation and sensitive conversion of redundant dairy buildings;
- encourage the placement of new farm buildings in locations which do not compromise the symmetry of traditional farmstead courtyard complexes or detract from their hilltop compositions;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### ***Forestry and Woodland***

- encourage a phased programme of replanting, managing and, where necessary, felling hedgerow trees, so as to maintain and restore the historic legacy of trees;
- conserve riparian woodland and wetland corridors;
- encourage the planting of new tree lines;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts in the most open areas;
- encourage the establishment of new riparian woodlands along the minor watercourses (which are otherwise unobtrusive);
- encourage policy woodland management that can maintain the character of designed landscapes where they occur. This may include small scale woodland planting;
- there may be opportunities for the creation of new woodlands in the area of transition between the more productive parts of the lowland and the surrounding uplands. Where appropriate, therefore, adopt a planting strategy that emphasises the transitional character of the landscape and includes:
  - expansion/regeneration of native woodlands;
  - mixture of broadleaf and conifer species;
  - small to medium sized coupes to reflect the scale of the landscape;
  - concentration of new woodland on steeper slopes, scarpes, in gullies and around the lower slopes;
  - retention of key views and open space links to higher ground;
- consider opportunities for new woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the importance of preserving less productive land which has high nature conservation values e.g. mosses or herb rich grasslands;
  - the importance of key views and features within the landscape;
  - opportunities to provide screening of urban expansion areas;
  - opportunities to link isolated areas of woodland.

### ***Recreation***

- develop a signing strategy for private businesses;
- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments;
- site theme parks, caravan parks or other facilities to avoid disrupting key views and to avoid adding obtrusive, gaudy structures into the landscape;
- support small scale, low-key tourism or recreational development.

### ***Development***

- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- identify potential housing sites and prepare preliminary design/development guidance;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include:
  - defining urban gateways, i.e. preventing sprawl and indeterminable urban edges;
  - the preservation or creation of green wedges to break up the urban edge;
  - new buildings which address surrounding areas and provide a high quality 'edge' to the settlements;
  - screening and controlling views of the towns by strategic planting schemes;
- discourage the simplistic grafting of housing estates onto the edge of settlements within field plots. Encourage more imaginative housing schemes which respond to the existing patterns of layout, structure, massing and scale while allowing for modern interpretations of traditional styles. This should include terraced and semi-detached houses laid out to define open spaces and roads avoiding suburban solutions;
- where development is permitted, encourage construction to consolidate existing villages, hamlets or groups of farmbuildings, and favour sheltered locations;
- consider the preparation of design guides as supplementary planning guidance;
- discourage development in the open countryside;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments;
- provide soft landscape frameworks in advance of building developments to accommodate urban expansion.

### ***Minerals***

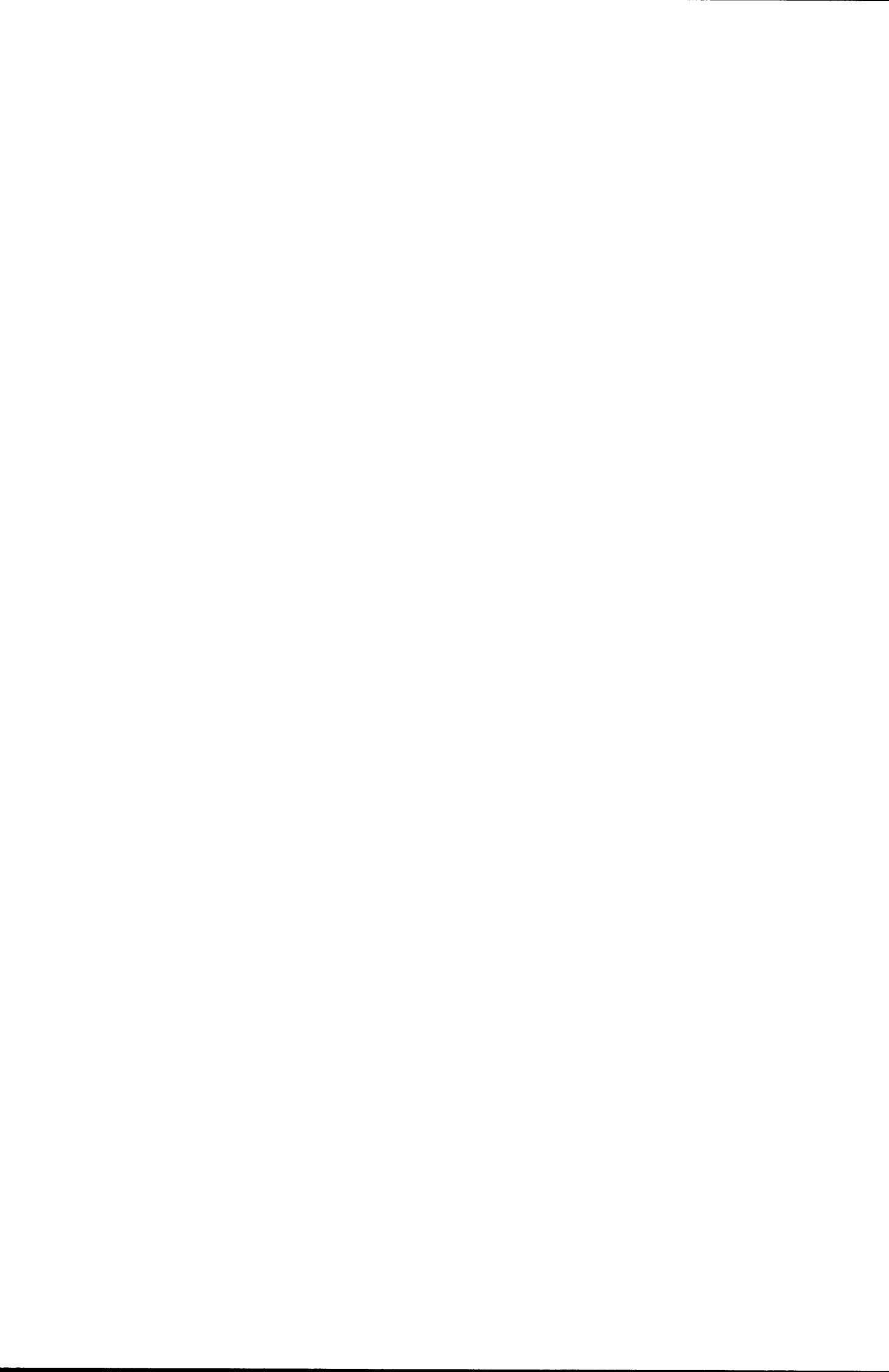
- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals;
- Monitor future demand for mineral working. Ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation. Restoration proposals should generally aim to recreate pre-existing landscapes rather than simply re-establishing previous land uses. This entails the recreation of features such as field boundaries, tree lines, uneven topography, ditches, and wetlands as appropriate. The precise details of restoration will, of course, reflect the detailed landscape character of the area affected. In some circumstances (for example, where the landscape has been previously damaged) it may be appropriate to examine the potential to create new landscapes;
- support selective reclamation of derelict mining sites but retention of key features;
- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character.

### ***Tall Structures***

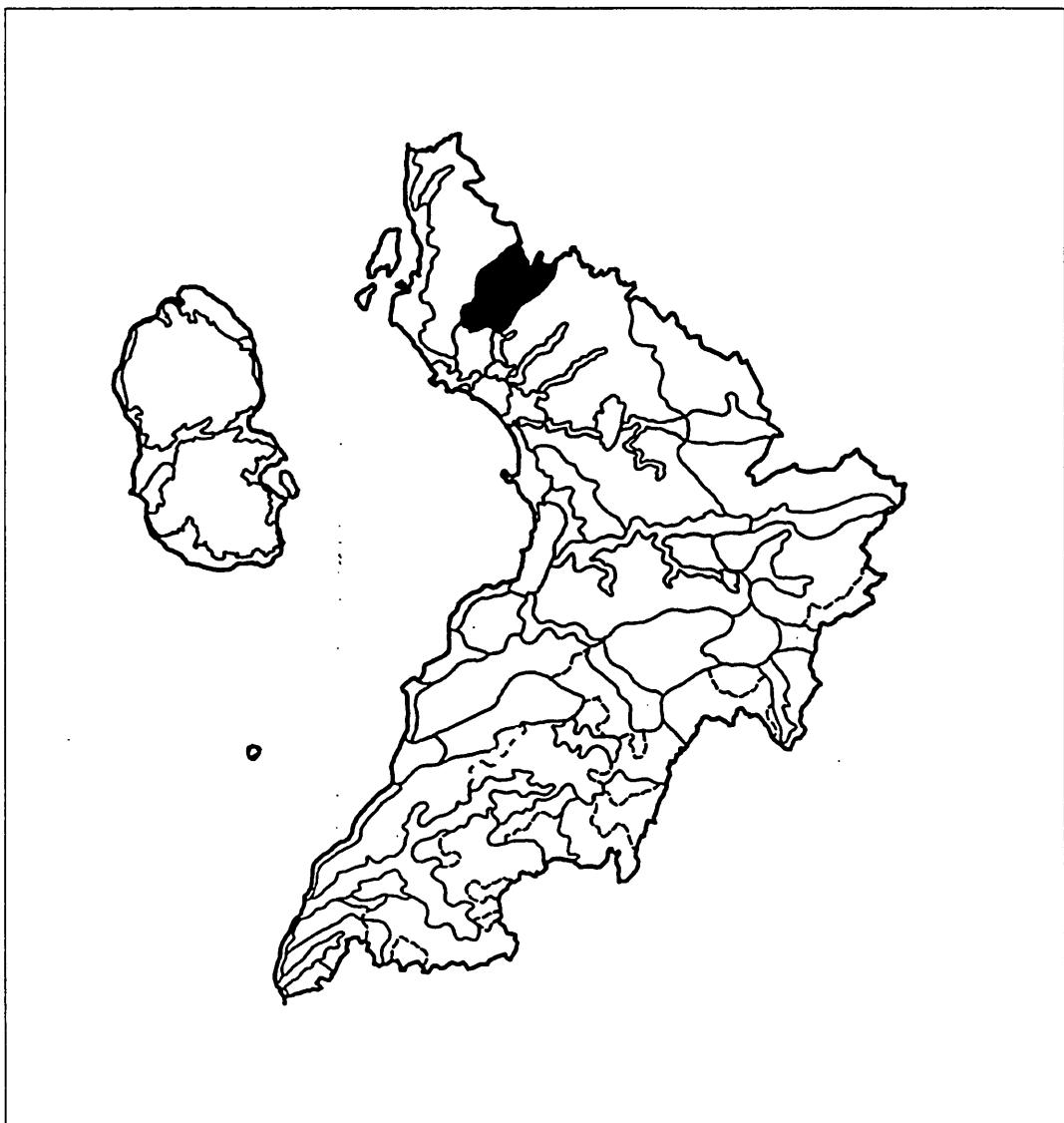
- assess any proposals for aerials or masts in terms of their visual impact on the landscape;
- encourage telecommunications companies to share facilities where it is evident that this would reduce the overall landscape impact;
- encourage the development of a regional strategy for renewable energy, including wind power, in order that the most appropriate types of development and areas come forward;
- some limited potential for small scale wind power development associated with local consumption;
- underground cable solutions should be considered in preference to pylon lines; these should adopt routes which run parallel to field boundary lines and which cause minimum disruption to hedgerows, and tree lines;
- where new power or telephone lines are proposed or required, encourage operators to adopt underground cable solutions.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- avoid the use of suburban features such as concrete kerbing in a rural setting unless absolutely necessary. Explore more appropriate alternatives;
- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- encourage on-site and off-site planting to better integrate major roads into the landscape and to provide screening of traffic;
- ensure that further proposals for improvements such as dualling or the provision of grade separated junctions are assessed in terms of their wider landscape impact. Where major, unmitigatable impacts exist, explore alternative solutions including traffic management and traffic calming;
- where new bypasses are proposed, consider the severing effect of the road on its setting. Consider also the view of settlements from the new road;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.



## H: BROAD VALLEY LOWLAND



- 5.84. In the northern part of the study area lies the Garnock Valley. Although a finer grain landscape assessment would draw a distinction between the flat valley floor, the settled and agricultural lower slopes and the moorland upper slopes, this regional scale assessment identifies the valleys as a single landscape type.
- 5.85. Underlain by millstone grit and crossed by igneous dykes, the valley has been substantially modified by glacial erosion forming a comparatively broad, shallow breach valley between the Ayrshire lowlands and the Clyde basin. The valley drains both south west and north east, the Ayrshire boundary lying on the watershed. The valley floor is broad and level, naturally flooded to form Kilbirnie Loch and Barr Loch (outwith the study area). Elsewhere, the valley floor has been drained to provide level fields. Moderately steep slopes rise to the North Ayrshire Hills. South of the valley the land rises less dramatically, blending into the Ayrshire Lowlands landscape type (G) before the Plateau Moorlands (R) are reached.

- 5.86. The valley has quite a dense network of woodland, comprising shelterbelts, hedgerow trees, trees along burns and gullies and that associated with large houses and estates. Examples include Kilbirnie House and Blair. Pasture or ley grassland with some arable predominate on the lower slopes, with abandoned fields and rough moorland on higher ground to the north. Fields are comparatively small, with good hedges on lower slopes. Some drystone dykes are found on the higher slopes, some abandoned and visible only as changes in colour and texture.
- 5.87. Settlement in the Garnock Valley dates back thousands of years. A number of hilltops, particularly to the north west are crowned with forts, while a line of castles - sited at the foot of tributary valleys - controlled movement between the lowland and the uplands. The survival of Welsh and Pictish names (eg Picton) reflects the importance of the area in the ancient kingdom of Strathclyde. It is likely that parts of the valley floor were drained during the medieval period, possibly by monks. Most settlement is located on drier slopes. Many settlements are historic in origin (Kilbirnie, for example has a 14C church) though underwent considerable expansion as a consequence of industrialisation. Mills, coal mines and iron and steelworks were all found within the valley. The largest steelworks was located at Glengarnock, while much of the northern part of the valley between Kilbirnie and Dalry shows the legacy of coal mining in the form of abandoned bings and spoil heaps. Quarrying continues with a hardrock quarry at Caerwinning and a limestone quarry at Beith.
- 5.88. Older buildings (including Victorian) are constructed in stone and slate. Newer structures tend to be rendered and painted white or cream with orange pan tile roofs. The latter are visible over a wide area. Also intrusive within the valley landscape are the pylons from Hunterston. They are especially visible where they cross the valley skyline.

### **Forces for change**

- 5.89. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.90. **Agriculture:** farming has an important influence on the landscape of this valley. Historically there appears to have been some contraction in activity, with abandoned fields found on many of the more marginal higher slopes. The structure of small to medium sized fields, hedges, hedgerow trees and bright green improved pastures provide an effective contrast with more open, upland areas, particularly to the north. In places the network of field boundaries is deteriorating as hedges become gappy and outgrown, often to be replaced by visually insignificant post and wire fences. Field boundary trees also show signs of decline.
- 5.91. **Woodland:** woodland comprises a mixture of farm woodlands, broadleaf shelterbelts, policy woodlands associated with large estates and, on the higher ground, a series of relatively small coniferous plantations. While none of these elements appears to be under particular threat, each makes an important contribution to the character of the valley and the contrast with surrounding areas.

- 5.92. **Development:** the Garnock Valley comprised one of the centres of heavy industry in Ayrshire. The development of mills, mines and iron and steelworks stimulated the growth of historic settlements such as Kilbirnie, Beith and Dalry. Although the heavy industry is now gone, there remains considerable amount of industrial and commercial activity. Settlements have expanded around their historic centres, and some of the more recent phases of development are easily identified by their use of designs and materials which do not reflect the local pattern of construction. Recent development on the northwest edge of Kilbirnie, for example, while well sited, and contained within a woodland framework, has used orange roof-tiles, immediately drawing attention to its presence in the landscape. Settlements such as Beith have expanded up to the town by-pass, raising issues to do with the location of future growth.
- 5.93. **Transport:** the A737 provides an important route through the Garnock Valley. The route has already been subject to considerable improvement where it passes through Johnstone and Linwood to the east. It is possible that there may be continued pressure for minor or major improvement works along the length of the road, including sections within Ayrshire.
- 5.94. **Minerals:** two hard rock quarries are sited within the Garnock Valley, one to the northeast of Beith, the other to the north of Dalry. The latter, in particular, is sited in a prominent location.

## **Management and Planning Guidelines**

- 5.95. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve and restore the valley's pastoral character and to mitigate the visual impact of built developments.**

### **Agriculture**

- maintain pastoral landscape;
- discourage improvements which result in loss of field boundaries or field boundary trees or historic features such as patterns of ridge and furrow which survive on heavier soils;
- encourage farmers and landowners to replant trees along field boundaries, initially along roads, but also between fields;
- where they occur, encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- where there is a need to screen development, explore the opportunities to increase woodland cover by creating new woodland belts or allowing some hedges to grow out;
- investigate the potential for encouraging herb rich meadows by reducing fertiliser and herbicide inputs, and by appropriate cutting;
- maintain the distinction between lowland pasture and upland rough grazing areas;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings, so as to maintain the current pattern and scale of farmsteads. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### ***Forestry and Woodland***

- as a matter of urgency, encourage a phased programme of replanting, managing and, where necessary, felling and replanting hedgerow trees where they are over mature, so as to maintain and restore the historic legacy of trees;
- conserve riparian woodland and wetland corridors;
- encourage the planting of new tree lines;
- encourage small scale woodland planting;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts in the most open areas;
- link woodlands on the valley floor and side slopes through the use of woodland belts, gully woodlands;
- support semi-natural and broadleaf woodland management and new broadleaf planting schemes;
- use new planting to create a framework to absorb earlier development and other visually intrusive features in the open countryside;
- encourage policy woodland management that can maintain the character of the designed landscapes;
- take proactive steps to extend woodlands around future quarry sites;
- with respect to the replanting of existing plantations on valley slopes:
  - encourage the rationalisation of woodland to avoid isolated, small to medium sized areas of plantation woodland which appear very prominent in an otherwise open landscape;
  - adopt a more naturalistic appearance, responding to the landform and features such as burns, gullies and crags;
  - create graded and irregular margins at the top and bottom of the slope, allowing views of upper slopes from within the valley;
  - discourage straight lateral edges - do not plant up to the edge of a land holding where this creates a strong and geometric vertical line;
  - employ more varied species mixes;
  - vary the size of felling coupes, with smaller areas on lower slopes.

### ***Recreation***

- develop a signing strategy for private businesses;
- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- focus recreation activities and the provision of new facilities at existing centres;
- support small scale, low-key tourism or recreational development, particularly where it can help sustain more marginal agricultural activity.

### ***Development***

- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- apply strict development control to ensure approach road corridors are framed by only high quality, sympathetic developments;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include: strategies for enhancing/conserving:
  - gateways and approaches;
  - along the valley or up the valley slopes;
  - landmark features including industrial heritage features;
  - planting frameworks which help to integrate the settlements;
- encourage new development to re-inforce the existing settlements;
- discourage the simplistic grafting of housing estates onto the edge of settlements. Encourage developers to use local building materials (butt gritstone) and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles. Avoid standard designs and layouts;
- consider the preparation of design guides as supplementary planning guidance, together with design briefs for large development sites;
- development in the countryside should be restricted and steered towards sites which can allow integration of new buildings i.e. within a woodland framework or adjacent to existing buildings;
- discourage isolated development in the open countryside;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- provide soft landscape frameworks in advance of building developments to accommodate urban expansion.

### ***Minerals***

- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals;
- monitor future demand for mineral working. Ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation;
- support selective reclamation of derelict mining and industrial sites but retention of key features;

- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character.

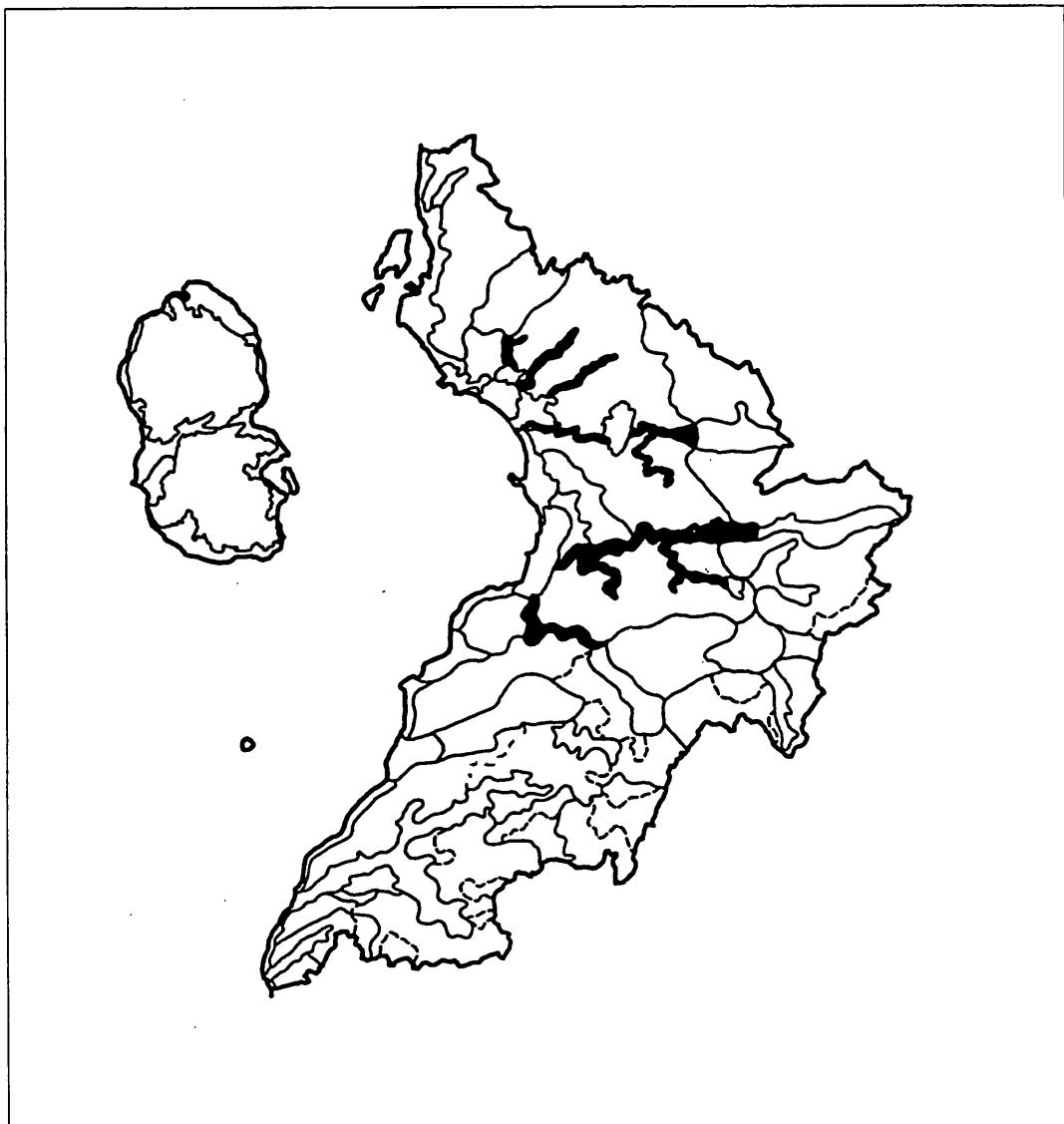
### ***Tall Structures***

- assess any proposals for aerials or masts in terms of their visual and landscape impact;
- encourage any wind power developments adjacent to the upper valley, to locate away from valley sides;
- encourage telecommunications companies to share facilities where it is evident that this would reduce the overall landscape impact;
- encourage the development of a regional strategy for renewable energy, including wind power, in order that the most appropriate types of development and areas come forward;
- planning policies should indicate that medium scale wind power development may be suitable in areas where landform can minimise intrusion and cultural history provides an appropriate context;
- underground cable solutions should be considered in preference to pylon lines.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- avoid the use of suburban features such as concrete kerbing in a rural setting unless absolutely necessary. Explore more appropriate alternatives;
- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape. The management and reinstatement of road corridor hedgerows and hedgerow trees is a key requirement in this landscape type;
- ensure road engineering works preserve the informal character of the valley roads;
- minimise cuttings, embankments, and signage and avoid 'over-engineered' traffic calming schemes on the approaches to settlements;
- Encourage on-site and off-site planting to better integrate major roads into the landscape and to provide screening of traffic;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.

## I: LOWLAND RIVER VALLEYS



- 5.96. The post glacial changes in sea level which created the raised beaches that are a characteristic feature of much of the Ayrshire coast, also caused rivers to enter a phase of down-cutting, creating a series of incised river valleys which cross the Ayrshire lowlands. The Garnock, Annick Water, Irvine, Ayr and Doon (together with a large number of smaller rivers and streams) all enter narrow, entrenched valleys as they leave the bold landscapes of the uplands and flow towards the coast. The underlying geology is varied. Most common are boulder clays and coal measures, but near Mauchline, the Ayr cuts through an area of sandstone, creating a dramatic gorge-like valley.
- 5.97. The river valleys are generally narrow, often just a few hundred metres wide, but bounded by steep slopes between 10 and 30 metres high. These valley slopes are frequently wooded with stands of beech and semi-natural woodland. Within the valleys, the rivers flow in tight meanders, often cutting into side slopes and enclosing semi-circles of rich pasture. Field boundaries, where they occur, tend to be hedges.

- 5.98. Settlement within the valleys tends to be comparatively limited, though a number of mills are sited alongside rivers, often at bridging points. The village of Sorn occupies a position at the point where the River Ayr leaves the uplands and enters its lowland valley. Kilmarnock is located on the Irvine. The rich woodland of the river valleys has, in a number of examples, been incorporated into the designed landscapes associated with historic houses and large estates.
- 5.99. These are small scale landscapes which, for much of the time, lie hidden within the wider landscape of the undulating Ayrshire lowlands. They often come as a surprise, signalled by a steep twist in the road, and the presence of linear woodlands along the steep valley slopes.

### **Forces for change**

- 5.100. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.101. **Agriculture:** like much of the Ayrshire lowlands, these sections of the river valleys are characterised by stable and relatively prosperous pastoral farming, creating few significant pressures on the landscape.
- 5.102. **Woodland:** in the otherwise predominantly unwooded landscapes of the Ayrshire lowlands, the woodlands found along the steep valley slopes represent an important landscape resource. While many are semi-natural in origin, management should seek to ensure their continued health and survival. Coniferous woodland should generally be avoided in this landscape type.
- 5.103. **Development:** settlement in the lowland river valleys is generally of a small scale, often comprising a handful of buildings concentrated at a bridging point, or near a mill. While such locations mean that settlements have a limited impact on the wider landscape (eg Sorn), significant additional development in these locations could undermine both the historic nature of many of these settlements and the small scale nature of the valley landscapes.
- 5.104. **Recreation:** the valleys represent a potential recreation resource of some importance, and could provide attractive pedestrian and cycle routes through the Ayrshire landscape, linking many sites of interest. It is important that the creation of such routes should be designed to minimise any landscape impacts.

### **Management and Planning Guidelines**

- 5.105. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the distinctive and small scale pastoral and woodland landscapes of the river valleys.**

### **Agriculture**

- maintain pastoral landscape, hedges and hedgerow trees;
- maintain present grazing patterns and upkeep of enclosures;
- reinstate hedgerows through replacement of post and wire fencing and future hedgerow maintenance;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### **Forestry and Woodland**

- encourage a phased programme of replanting, managing and, where necessary, felling hedgerow trees, so as to maintain and restore the historic legacy of trees;
- conserve riparian woodland and wetland corridors;
- encourage the planting of new tree lines;
- encourage small scale woodland planting on steep valley slopes;
- use new planting to create a framework to absorb earlier development in the open countryside and other visually intrusive features;
- encourage policy woodland management that can maintain the character of the designed landscapes;
- enhance parkland feel through small scale woodland planting;
- consider opportunities for new woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the relative importance of different areas of existing woodland (e.g. commercial plantation versus policy woodland) and how this would be influenced by an increase in woodland cover;
  - the importance of key views and features within the landscape;
  - opportunities for provide screening;
  - opportunities to link isolated areas of woodland.

### **Recreation**

- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments;
- influence the design and provision of associated signage;
- support small scale, low-key tourism or recreational development. The creation of paths, trails and cycle routes could provide a way of opening these areas up to recreation activity while managing the resulting impact.

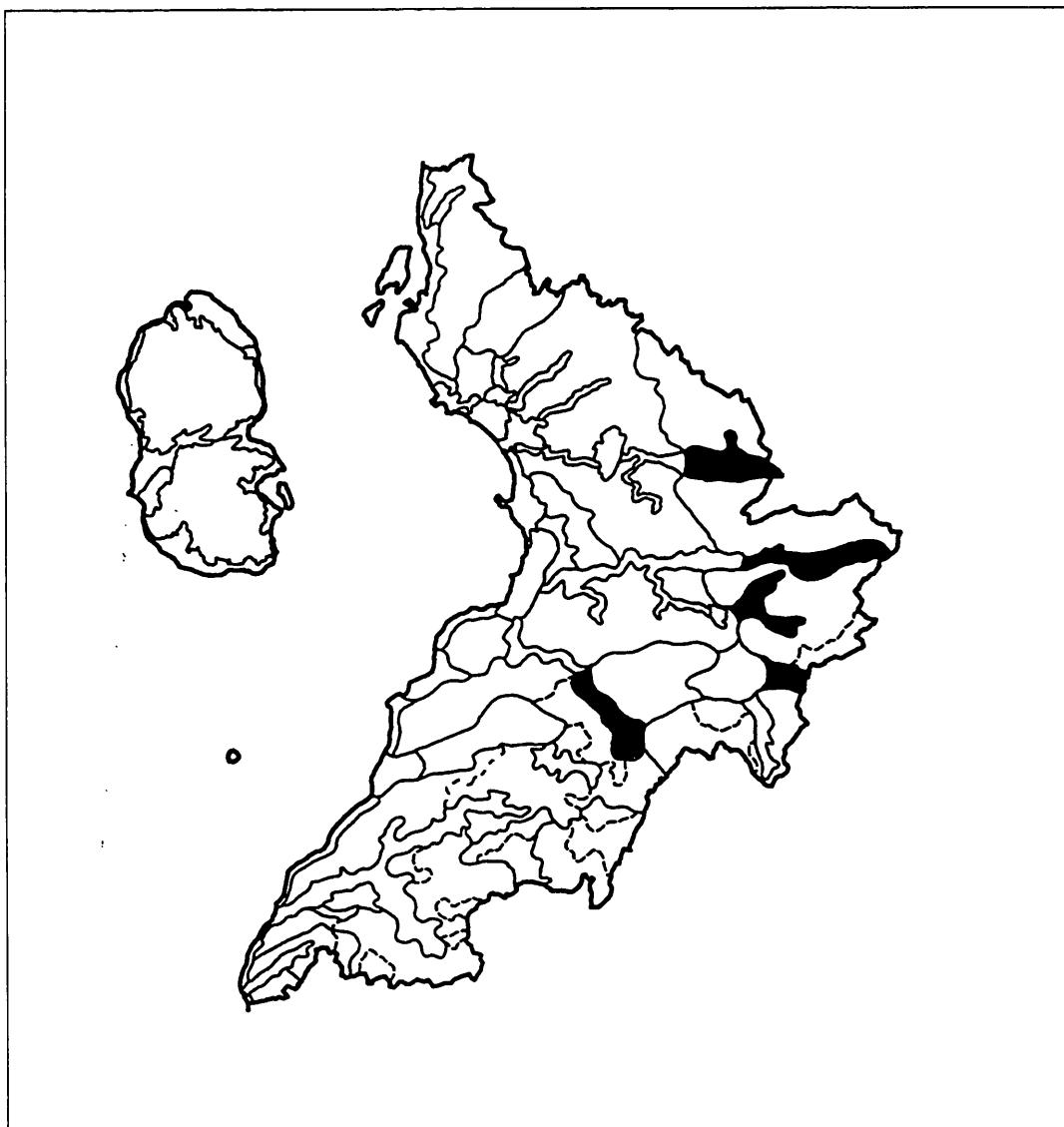
### ***Development***

- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- encourage new development to re-inforce the existing settlement;
- discourage the simplistic grafting of housing estates onto the edge of settlements. Encourage more imaginative schemes which respond to the existing patterns of layout, structure, massing and scale;
- encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles. Avoid standard designs and layouts;
- consider the preparation of design guides as supplementary planning guidance;
- discourage development in the open countryside;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments;
- produce combined development strategies and design guidance for settlements of particular architectural merit and sensitivity.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- ensure road engineering works preserve the informal character of the valley roads;
- minimise upgrading or improvement of roads, particularly where this involves the loss or modification of traditional bridges, the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.

## J: UPLAND RIVER VALLEYS



- 5.106. The rim of hills which surrounds the Ayrshire lowlands is cut by a series of medium sized river valleys - the Doon, Nith, Glenmuir, Ayr and Irvine. Although each has its own distinctive character, they share a number of common characteristics, largely as a result of their scale and the sense of enclosure provided by surrounding uplands.
- 5.107. The Upper Doon Valley runs from south east to north west through an area of coal measures, limestone and millstone grit. The valley is comparatively broad in its upper sections near Dalmellington, but narrows as the river flows north to Patna. The river itself meanders back and forth across a narrowing floodplain which is wet in its upper reaches and pastoral lower down. Pastures on the lower valley slopes quickly give way to rougher moorland on the upper slopes. Extensive areas of commercial forestry lie to the west and extend into the valley around Patna. The occurrence of coal, limestone and ironstone deposits has had a significant influence on the landscape. Early exploitation led to the development of coal mines, iron works, spoil tips, mineral railway, and the industrial settlements of Dalmellington, Waterside and Patna. The remains of 19th and

early 20th century industrial activity form a layer in the valley's landscape, representing one phase of settlement and land use. Modern coal extraction, however, concentrated on the hills above Dalmellington, takes the form of open-cast mining. This is of a very different scale to that in the past, and changes the landscape over a significant area.

- 5.108. The section of Upper Nithsdale lying within Ayrshire is underlain by sandstones and millstone grit. Glacial erosion has overdeepened the valley, creating a distinctive U-shaped valley between steeply rising hills to the north and south. The river meanders freely across a broad, flat valley bottom. In contrast to areas to the east and west, where the legacy of coal based industry is evident, this section of the valley is predominantly pastoral in character. Improved pastures on the valley floor and lower slopes give way to areas of rougher grazing and then open moorland. Field boundaries tend to be post and wire fences and tree cover is limited to a scatter of trees along tributary burns, some reaches of the river and in the area of transition between enclosed and unenclosed land. Settlement is scarce, confined to farmsteads sites on the lower valley slopes. However, the valley is important for communication, providing a lowland corridor between the Ayrshire lowlands and the Solway coast.
- 5.109. The Glenmuir Valley runs from north east to south west, draining Airds Moss and the moorlands to the south of the Ayr. Though of a smaller scale than the other upland valleys, the Glenmuir Valley has acted as a focus for industrial development and settlement. The area is scarred by many bings and spoil tips, these are mostly small scale and reflect the historic exploitation of the more accessible coal seams. The settlements of Auchinleck, Holmhead and Cumnock are sited at the point where the upland valley gives way to the more pastoral basin. These settlements are predominantly 20th century in character, and are often quite prominent features in the open landscape.
- 5.110. The Upper Ayr Valley can be sub-divided into sections. Between the Ayrshire boundary at Glenbuck and a point about three kilometres downstream of Smallburn, the valley follows an important faultline which runs parallel to the Southern Uplands Fault. Here the valley is broad and open, enlarged by glacial erosion, and the valley slopes rise to the gently rolling hills of the Plateau Moorland landscape type (R). Below Smallburn, the river turns north, leaving the faultline valley (which is subsequently drained by the Bellow Water) to flow westwards through a much smaller scale valley incised into the rising moorland. The valley which is about 30 metres deep and just 500 metres wide has steep eroding slopes with hanging birch and hazel woodlands. Above the steep terrace slopes, lies extensive, open moorland. The river itself winds back and forth across the floodplain, enclosing a series of lush green pastures. As the river reaches the village of Sorn its upland hinterland disappears and the valley, still deeply incised into the soft sandstones, becomes more settled and wooded. It takes on the character of the Lowland River Valleys landscape type (I).
- 5.111. Patterns of land use and settlement also differ between these two sections of the Upper Ayr Valley. The broader upper section has a long industrial history, based on the deposits of coal, limestone and iron ore. The 19th century saw extensive exploitation of these minerals with pits, iron and steel works, railway lines and settlements such as Smallburn and Muirkirk. This industrial activity has left a legacy of bings, embankments and other relics which form an important part of the historic landscape. While the pits and steelworks have closed, coal mining continues in the form of open-cast workings between Glenbuck and Muirkirk.

5.112. The Upper Irvine Valley follows another faultline and has a more pronounced V-shape than other valleys, with steeper valley slopes and a narrower floodplain. At the same time, the valley is more settled and more wooded, creating a distinctive variation in landscape character. Loudoun Hill, a volcanic plug at the head of the valley is a distinctive landmark, visible from much of the valley. The valley slopes lie mainly under pasture, often enclosed with treelined hedgerows. A network of narrow country roads extends up onto the hillsides. There is also a considerable amount of woodland, much of it associated with the designed landscapes of Loudoun Castle and Lanfine House. Set within the valley are a series of small industrial towns (Newmilns, Greenholm and Darvel) which grew up around the textile industry, particularly lace making, some of which continues today. These tend to be linear settlements, strung along the main road which follows the valley, their townscapes dominated by churches and mill buildings. Sand and gravel deposits are being exploited at the head of the valley where the A71 climbs up onto the moorland. The quarries have resulted in Iron Age finds, but also the loss of an Antonine fort near Loudoun Hill.

### Forces for change

- 5.113. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.114. **Agriculture:** many of these upland valleys are characterised by moorland vegetation where farming activity is confined to sheep grazing. On better lower slopes, and valley floors, there are some fields of improved pasture, enclosed by hawthorn hedges with occasional hedgerow trees. Areas such as the Upper Ayr valley are characterised by many outgrown beech hedges. In places the structure of field boundaries is deteriorating and post and wire fences are used to supplement or even replace gappy hedges. Over time, this will result in the weakening of the contrast between the enclosed lower slopes and the open moorland slopes above.
- 5.115. **Woodland:** the extent of deciduous woodland varies between the valleys. While the upper Doon and much of the upper Ayr valleys have little broadleaf woodland, the Irvine valley in particular is characterised by extensive woodlands associated with designed landscapes. Maintenance of these woodlands is important for the conservation of landscape character. Semi-natural woodland also makes a significant contribution where it occurs to any extent. The principal examples of such woodlands are along the middle section of the Ayr valley where broadleaf woodland clothes the steep slopes enclosing the river. In places, this woodland appears to be in decline, suggesting that grazing pressures may be preventing natural regeneration. Again, these woodlands make an important contribution to the valley's landscape character.

- 5.116. Coniferous woodlands are also a feature of several of these valleys, particularly where more extensive plantations on surrounding uplands extend into the valley. Elsewhere, the plantations are much more limited in extent, often forming shelter belts or geometric areas of woodland. Furthermore, these valleys were identified in the Strathclyde Indicative Forestry Strategy (Strathclyde Regional Council, 1988) as falling into the 'preferred' (the Ayr, Glenmuir and Doon Valleys) and 'potential' (the Nith and Irvine Valleys) areas for additional forestry. There may be opportunities to use new planting to assist in the enhancement of land that has been damaged in the past, or which is subject to open-cast working. Equally, there will be opportunities to improve the nature of existing plantations as the Forestry Authority's design guidelines are applied to the planting phase of the next rotation. New planting should take into account the character of the landscape and the occurrence of areas of known or unknown archaeological importance.
- 5.117. **Development:** with the exception of the Upper Nith, the history of industrial development means that these river valleys are relatively settled and developed. Two issues relate to this. The first is the effect of the decline of the area's industrial base, reflected to a degree in the appearance of a number of industrial settlements. The second is the nature of the development that has occurred in these areas during the present century. Towns such as Muirkirk, for example, have expanded by the addition of suburban housing estates and with no visual integration with the surrounding upland landscape.
- 5.118. **Minerals:** the upland river valleys, and the moorlands immediately fringing them, provide the focus for current open-cast coal mining activity. This activity is greatest in the Doon Valley, near Dalmellington, and the Glenmuir and upper Ayr Valleys. There are pressures for additional open-cast sites in these areas. The nature of open-cast workings means that there could be significant short and longer term implications for the landscape of these areas.
- 5.119. In addition to coal working, sands and gravels are quarried in the Upper Irvine valley in the vicinity of Loudoun Hill. This, together with additional sand quarrying further east (outwith Ayrshire) has a cumulative impact on the landscape, particularly for those travelling along the A71.

### **Management and Planning Guidelines**

- 5.120. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to maintain the contrast between the valleys and surrounding uplands, to address issues associated with industrial decline and mineral working, and to maintain each of the valleys' distinctive character.**

#### ***Agriculture***

- maintain and enhance avenues/hedgerow trees;
- maintain and reinstate hedgerows and hedgerow trees;
- maintain pastoral landscape;

- discourage improvements which result in loss of field boundaries or field boundary trees;
- encourage farmers and landowners to replant trees along field boundaries;
- encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- explore the opportunities to increase woodland cover by creating new woodland belts, particularly where there is a need to screen existing and possible future development;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### ***Forestry and Woodland***

- encourage a phased programme of replanting, managing and, where necessary, felling hedgerow trees, so as to maintain and restore the historic legacy of trees;
- conserve riparian woodland and wetland corridors;
- encourage the planting of new tree lines and small scale woodlands;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts in the most open areas;
- consider opportunities for new woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the relative importance of different areas of existing woodland (e.g. commercial plantation versus policy woodland) and how this would be influenced by an increase in woodland cover;
  - the importance of key views and features within the landscape;;
  - opportunities to provide screening;
  - opportunities to link isolated areas of woodland;
- use new planting to create a framework to absorb earlier development in the open countryside and other visually intrusive features;
- encourage policy woodland management that can maintain the character of the designed landscapes;
- cultural features, particularly mining relics, should not be obscured by forestry;
- discourage the creation of extensive areas of coniferous forestry within the upland valleys; concentrate planting in topographic bowls, up gullies and along scarp slopes leaving an interlinked pattern of open space;
- encourage the remodelling of small, geometric plantations, to create more naturalistic woods;
- forestry restructuring for spatial, age, species and wildlife diversity should be progressed;
- forest restructuring should seek to 'expose' and preserve cultural features such as walls and archaeological ruins; new planting should conform to the Forestry Authority's design guidelines. In particular, it should respond to the small to medium scale nature of the landscape, the importance of views, and historic and ecological values.

### ***Recreation***

- develop a signing strategy for private businesses;
- encourage the sympathetic restoration and re-use of redundant farm and industrial buildings in the countryside;
- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments;
- site caravan parks or other facilities to avoid disrupting key views;
- tourism development and facilities should be sited to avoid unchecked linear development or development which sits uncomfortably in the landscape.

### ***Development***

- support and promote economic regeneration and high quality building and environmental developments to halt perceived air of abandonment in former industrial areas;
- produce combined development strategies and design guidance for settlements of particular architectural merit and sensitivity;
- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- apply strict development control to ensure approach road corridors are framed by only high quality, sympathetic developments which adopt an appropriate building line;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include:
  - the definition of 'gateways' to settlements
  - the refurbishment/remodelling of urban edge buildings
  - the development of green corridors and fingers, where possible, to integrate the urban edges and provide links to the countryside
  - screening planting around unsightly developments
- discourage the simplistic grafting of housing estates onto the edge of settlements. Encourage more imaginative schemes which respond to the existing patterns of layout, structure, massing and scale;
- provide soft landscape frameworks in advance of building developments to accommodate urban expansion;
- encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles;
- consider the preparation of design guides as supplementary planning guidance;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted to prevent the suburbanisation of the countryside and the loss of vernacular features; avoid the emasculation of important industrial buildings through conversion to new uses.

### ***Minerals***

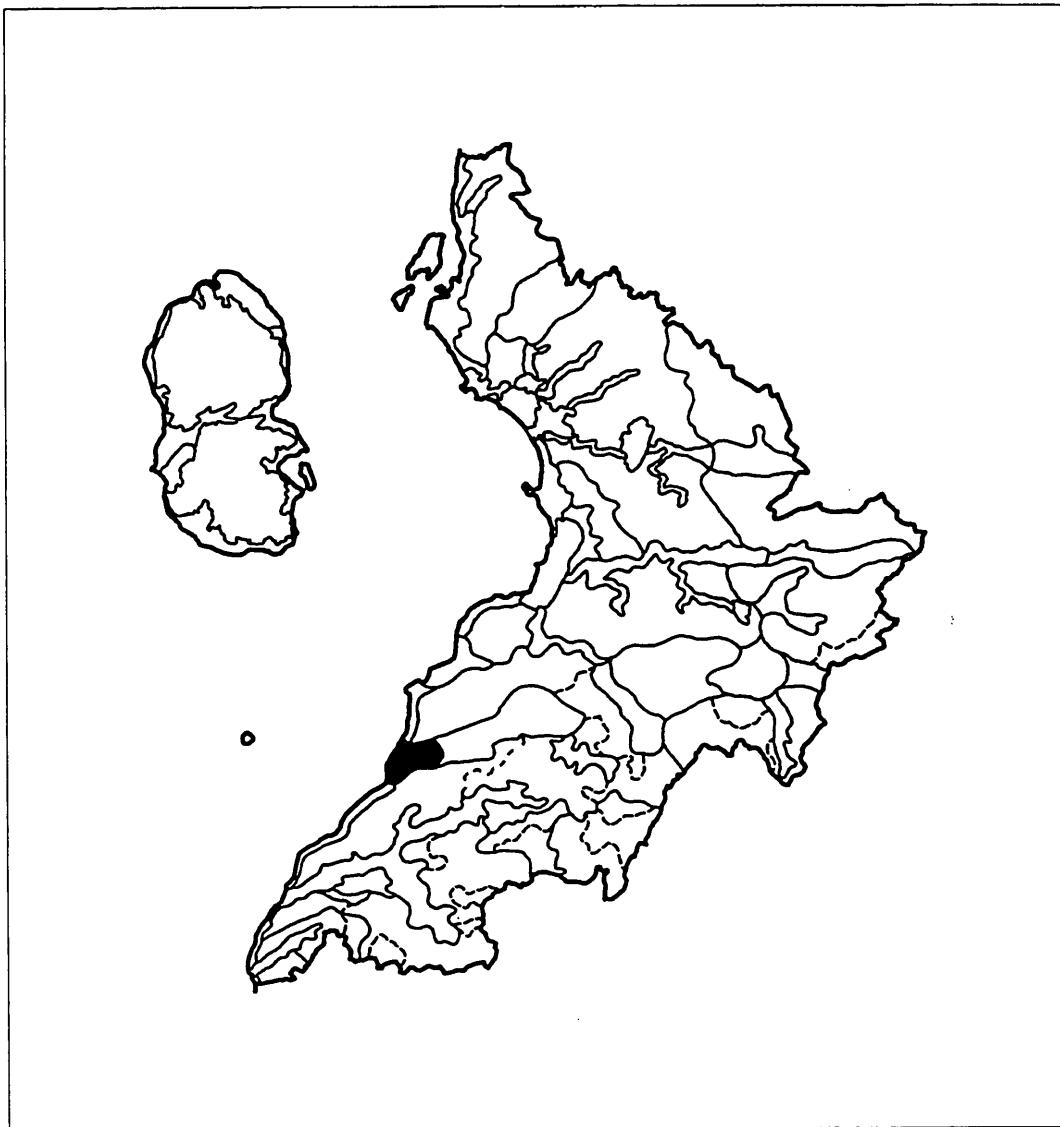
- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals;
- ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation;
- support selective reclamation of derelict mining sites but retention of key features, particularly within areas designated for their cultural heritage importance;
- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character. This should be a particular aim in areas where it is likely that future mineral extraction will occur. The cumulative and cross boundary effects of several mineral workings in the area should be addressed by coordination of different local authority strategies and responses.

### ***Transport***

- ensure road engineering works preserve the informal character of the more minor valley roads;
- develop a road use hierarchy as a basis for management;
- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape;
- avoid the use of suburban features such as concrete kerbing in a rural setting unless absolutely necessary. Explore more appropriate alternatives;
- road upgrading works should be designed to fit the valley floor and side slope topographic variations, thereby avoiding or minimising cuttings and embankments;
- encourage on-site and off-site planting to better integrate major roads into the landscape and to provide screening of traffic;
- where new bypasses are proposed, consider the severing effect of the road on its setting. Consider also the view of settlements from the new road;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated;



## K: LOWER DALE



- 5.121. The Lower Dale landscape type occurs in the lower reaches of the valley of the Water of Girvan, coinciding with the change from limestone to softer red sandstone. The valley is bounded by faultlines to the north and south. The valley is broad with a relatively flat valley floor and well defined slopes rising to foothill summits to the north and south. The Water of Girvan itself meanders back and forth across the valley floor. Unlike higher sections of the valley, which tend to be pastoral, the Lower Dale landscape type is characterised by arable cultivation, with medium sized fields enclosed by beech and hawthorn hedges and occasional drystone dykes. Hedgerow trees and shelterbelts are dominated by mature beech trees.
- 5.122. The historic importance of the valley as an area of fertile agricultural land, and a sheltered route for settlement and communication, is reflected in the presence of castles on lower valley slopes, a feature which is particularly characteristic of the Middle Dale landscape type (L), further inland. Modern settlement comprises a number of large farmsteads, most located on the valley floor, the port of Girvan and the industrial estate at Kildonnan.

Girvan has experienced moderate growth during the 20th century, expanding beyond its historic core and occupying much of the level ground at the mouth of the valley. Traditional building materials include red sandstone and slate. More modern development uses a much wider range of materials.

## Forces for change

- 5.123. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.124. **Agriculture:** the pattern of arable fields, hedges and hedgerow trees is an essential feature of this landscape type. In other parts of the country, it is arable areas which have experienced the most significant loss of field boundaries, as fields have been amalgamated and many hedges replaced by post and wire fences. While these trends do not appear to have affected this area to any great extent, it is possible that this could occur in the future.
- 5.125. **Woodland:** trees in the form of shelterbelts and field boundary trees, also make an important contribution to the landscape. These features are potentially vulnerable unless shelterbelts are maintained and trees are replaced when they are felled.
- 5.126. **Development:** the coastal town of Girvan is sited at the mouth of the lower dale. Expansion of the town beyond its historic core has extended the urban influence into the rural landscape of the valley. Further pressure exists between the settlement and the distillery on the nearby industrial estate. Screening and the design of any further development could mitigate this influence.

## Management and Planning Guidelines

- 5.127. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the relatively open, arable landscape of the lower dale, maintaining contrasts with the neighbouring middle dale, upland and coastal landscapes.**

### **Agriculture**

- discourage improvements which result in loss of field boundaries or field boundary trees;
- encourage farmers and landowners to replant trees along field boundaries, initially along roads, but also between fields;
- encourage the conservation of dry stone dykes in local red sandstone with an emphasis on roadside walls and others in highly visible areas;
- explore the opportunities to increase woodland cover by creating new woodland belts, where there is a need to screen development;

- maintain and enhance hedges, walls, avenues and hedgerow trees;
- maintain the distinction between lowland cereals and upland grazing areas;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

#### ***Forestry and Woodland***

- encourage a phased programme of replanting, managing and, where necessary, felling over mature hedgerow trees, so as to maintain and restore the historic legacy of trees;
- conserve riparian woodland and wetland corridors;
- encourage the planting of new tree lines;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts in the most open areas;
- use new planting to create a framework to absorb development in the open countryside and other visually intrusive features;
- encourage policy woodland management that can maintain the character of the designed landscapes;
- consider opportunities for new woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the importance of key views and spatial enclosure;
  - opportunities to provide screening for new developments;
  - opportunities to link individual areas of woodland and integrate woodlands with nearby farm woodlands;
  - opportunities to extend semi-natural woodlands and create wildlife corridors.

#### ***Recreation***

- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- general presumption against large scale built developments;
- concentrate tourist facilities within existing settlements;
- site caravan parks or other facilities to avoid disrupting key views;
- support small scale, low-key tourism or recreational development.

#### ***Development***

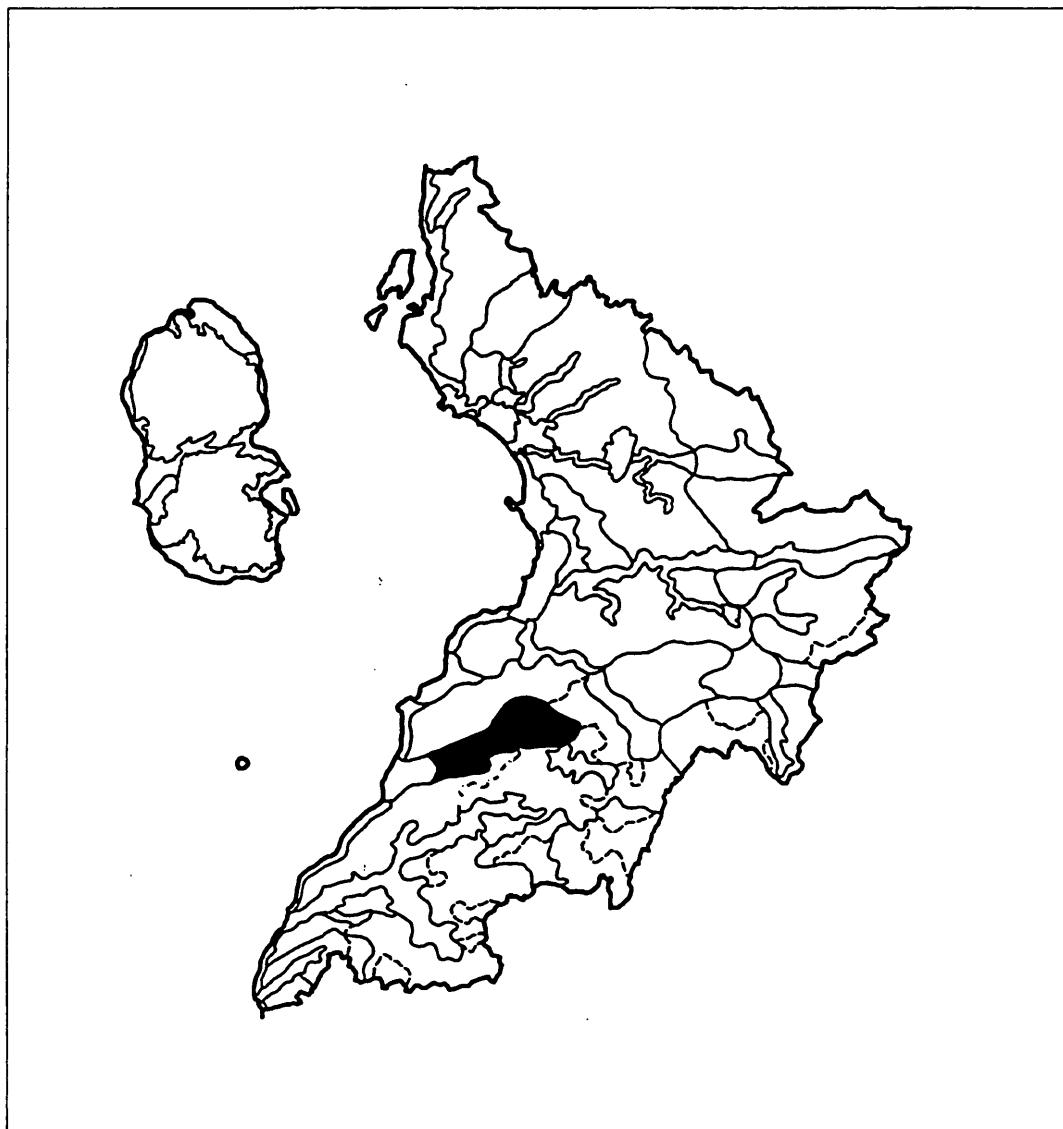
- define the acceptable limits of and sites for new development which can be accommodated within the topographic constraints of the lower dale without removing open areas essential for views and providing the setting for established settlements. This is a particular concern in relation to Girvan and the nearby industrial estate;
- produce combined development strategies and design guidance for settlements of particular architectural merit and sensitivity;

- encourage new development only where it can re-inforce the existing settlement pattern;
- encourage more imaginative schemes which respond to the existing patterns of layout, structure, massing, materials and scale;
- encourage developers to use local building materials and to adopt vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles;
- consider the preparation of design guides as supplementary planning guidance;
- use woodlands to provide a backcloth or framework for new development; avoid isolated developments particularly in skyline/valley-edge locations;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include:
  - creating gateways into settlements through new building or planting;
  - modifying views in and out of settlements through screen planting;
  - conserving existing landmark buildings eg. church spires;
  - ensuring new peripheral buildings are of a high quality and appropriate in layout, scale and colour.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- ensure road engineering works preserve the informal character of the valley roads;
- minimise upgrading or improvement of roads, particularly where this involves the removal of mature woodlands, or the creation of cuttings and embankments;
- where road improvement schemes take place, ensure that walls, hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are re-instated;
- carefully consider the pressures of parking in relation to potential tourism activities, avoid solutions which dominate settlements with centres of high architectural merit.

## L: MIDDLE DALE



- 5.128. The Middle Dale landscape type occurs only once within Ayrshire, in the middle reaches of the valley of the Water of Girvan (between Old Dailly and Kirkmichael). Here the valley is formed between two parallel faultlines, with red sandstone to the north and south giving way to limestone within the valley. The valley topography is relatively complex, lacking the clearly defined valley floor and side slopes of the narrower Stinchar Valley to the south. Valley flanks slope gently towards the river and have subtle terraces and undulations while the floodplain merges with the hill slopes. The river meanders across the floodplain, eroding bluffs in the valley moraines.
- 5.129. Much of the valley floor, and some of the lower slopes are in pastoral use, but the large number of historic houses and castles, many with associated policies and designed landscapes, gives the valley floor a richly wooded, parkland character. Shelterbelts, plantations and parkland trees are complemented by a network of hedges and drystone dykes. Pastures give way to more extensive plantations or areas of rough grazing on the upper slopes. Semi-natural woodland is found on some of the steepest slopes.

- 5.130. Historically, the valley of the Water of Girvan provided an important corridor for communication and an area of sheltered lowland. Its importance is reflected in the proliferation of defensive sites which range from hillforts to castles and large houses. Castles include Dalquharran, Bargany and Brunston. In addition to these historic landscapes, there is a scatter of farmsteads and small hamlets, though settlement is dominated by the expanded village of Dailly. Building materials tend to comprise a mixture of grey stones, sandstones and whitewashed harl, with slates.

### Forces for change

- 5.131. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.132. **Agriculture:** the pattern of pasture, hedges, hedgerow trees, shelterbelts and policies is an essential feature of this landscape type, providing contrasting textures and colours when compared with the moorland hills to north and south. Estate ownership and relatively stable agriculture in this area suggests that these elements are not under particular pressure.
- 5.133. **Woodland:** trees, in the form of shelterbelts and field boundary trees also make an important contribution to the landscape. These features are potentially vulnerable unless shelterbelts are maintained and trees are replaced when they are felled.
- 5.134. **Development:** this is a comparatively settled landscape with a number of large estates and a scatter of settlements and farmsteads. Generally, development pressures appear to be few, though a large development of holiday chalets is currently under construction in cleared woodland near Dailly. Initial landscape impacts are likely to be reduced by the provision of extensive screen belts around the margin of the site. There may, however, be indirect effects, including an increase in traffic in the surrounding area. Conversely, such development may provide the financial basis for maintaining other designed elements of the landscape.
- 5.135. **Recreation:** some historic estates, as elsewhere, have explored new ways of generating revenue. A new golf-course and associated chalet accommodation has recently been constructed within the Brunston Estate, bringing with it an inevitable change in landscape character. There may be pressure for further recreational developments in this landscape type.
- 5.136. **Wind power:** the combination of landscape elements, particularly the presence of castles and policy landscapes gives the middle dale a rich, historic character. This would be sensitive to the development of wind turbines on enclosing skylines, or indeed to the construction of similar tall structures.

## **Management and Planning Guidelines**

5.137. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve and reinforce the wooded character of this pastoral valley, retaining contrasts with exposed uplands and with the lower, more open sections of the dale. Policy and other broadleaf woodlands are central to this character.**

### ***Agriculture***

- encourage the conservation and management of field boundaries and field boundary trees;
- encourage farmers and landowners to replant trees along field boundaries, initially along roads, but also between fields;
- explore the opportunities to increase woodland cover by creating new woodland belts, where there is a need to screen development;
- hill farming should be maintained on dale slopes as an essential feature of the landscape;
- investigate the potential for establishing herb rich meadows;
- maintain pastoral landscape;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### ***Forestry and Woodland***

- as a matter of urgency, encourage a phased programme of replanting, managing and, where necessary, felling over-mature hedgerow trees, shelterbelts and policies, so as to maintain and restore the historic legacy of woodland within the dale landscape;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts in the most open areas;
- explore opportunities to create a transition from the policy and shelterbelt woodland on the dale floor and lower slopes, to areas of commercial plantation on the higher slopes;
- retain riparian woodland and consider enhancement through small scale planting;
- encourage policy woodland management that can maintain the character of the designed landscapes; and enhance the parkland character by appropriate small scale planting;
- forestry restructuring for spatial, age, species and wildlife diversity should be progressed - implement a phased programme of felling, redesign and replanting of existing plantations to reduce the adverse impact on the environment;

- general presumption against large scale extension of existing forest blocks into the valley;
- with respect to the replanting of existing plantations on dale slopes:
  - encourage the rationalisation of woodland to avoid isolated, small to medium sized areas of plantation woodland which appear very prominent in an otherwise open landscape;
  - adopt a more naturalistic appearance, responding to the landform and features such as burns, gullies and crags;
  - create graded and irregular margins at the top and bottom of the slope, allowing views of upper slopes from within the valley;
  - discourage straight lateral edges - do not plant up to the edge of a land holding where this creates a strong and geometric vertical line;
  - employ more varied species mixes;
  - vary the size of felling coupes, with smaller areas on lower slopes.

### ***Recreation***

- historic and designed landscapes are an important feature of this landscape type. Further loss or modification as a result of inappropriate recreational development should be avoided. Where recreational development is permitted within these landscapes, developers should be required to retain and maintain key factors (including woodland) and minimise the prominence of modern features;
- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- ensure that proposals for expansion of facilities are subject to rigorous visual impact assessment adopting, for example, the approach set out in the guidance published by the Landscape Institute and the Institute of Environmental Assessment (1995);
- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments;
- influence the design and provision of associated signage;
- site caravan parks or other facilities to avoid disrupting key views;
- support small scale, low-key tourism or recreational development.

### ***Development***

- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- apply strict development control to ensure approach road corridors are framed by only high quality, sympathetic developments;
- encourage new development to re-inforce the existing settlement;

- encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles. Avoid standard designs and layouts;
- consider the preparation of design guides as supplementary planning guidance;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments;
- provide soft landscape frameworks in advance of development.

### ***Tall Structures***

- assess any proposals for aerials, masts or other tall structures in surrounding upland areas in terms of their visual impact on the landscape of the middle dale;
- encourage any such developments to locate away from valley sides;
- underground cable solutions should be considered in preference to pylon lines.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- ensure road engineering works preserve the informal character of the valley roads;
- minimise upgrading or improvement of roads, particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.



## LANDSCAPE CHARACTER TYPES



RAISED BEACH COAST: view to the north of Largs



COASTAL VALLEY WITH POLICIES: view south towards Culzean Castle.



LOWLAND COAST: dunes and beach to the east of Saltcoats



COASTAL LOWLAND MOOR: view west over Machrie Moor, Arran



COASTAL FRINGE WITH AGRICULTURE: Sliddery, Arran



AYRSHIRE LOWLANDS: rolling pastures between Moscow and Waterside



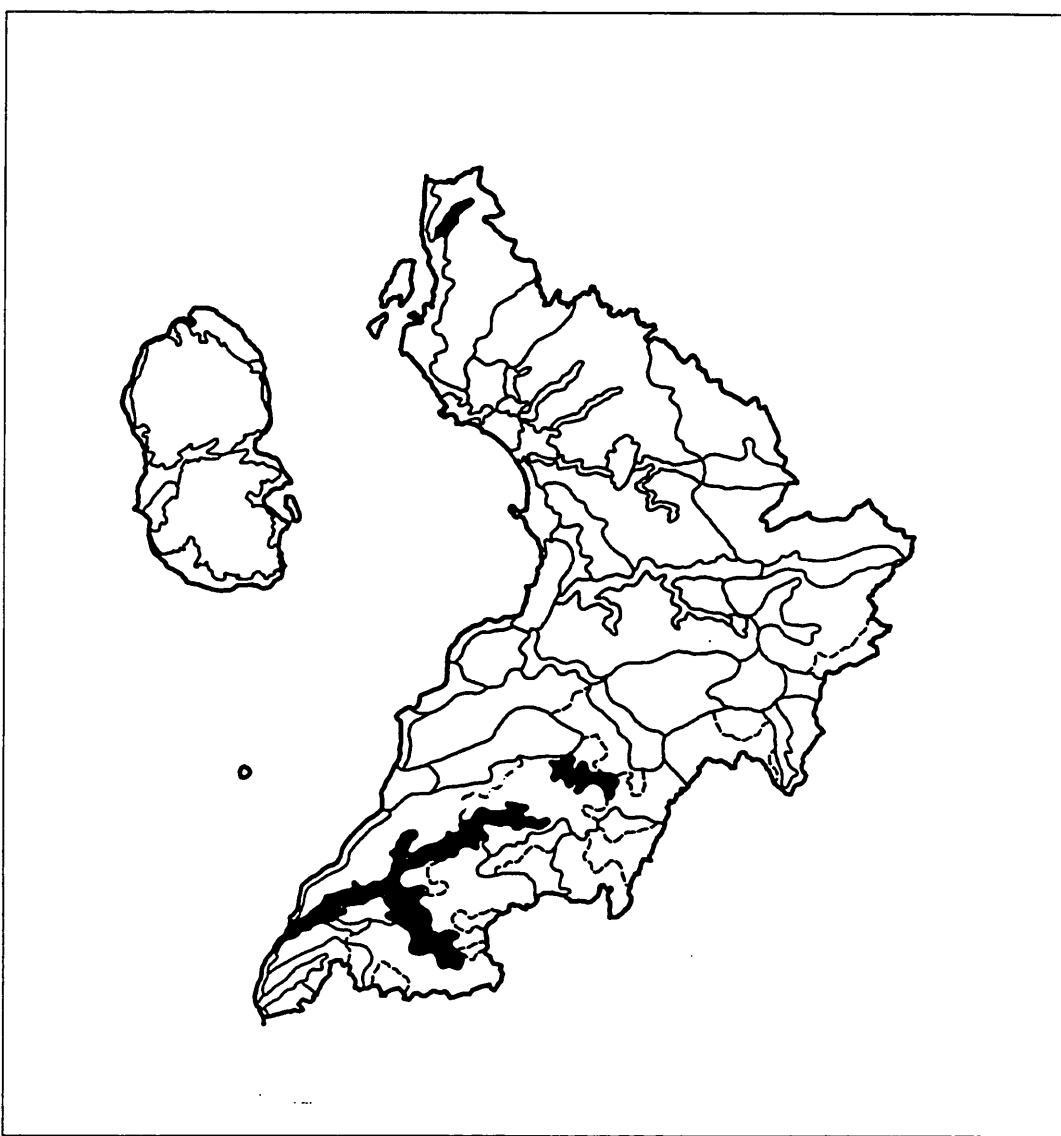
COASTAL HEADLANDS: Heads of Ayr, seen from Brown Carrick Hill



BROAD VALLEY LOWLAND: The Glengarnock Valley near Beith



## M: INTIMATE PASTORAL VALLEYS



- 5.138. A number of narrow, Intimate Pastoral Valleys have been cut into the foothills and moorlands of the Ayrshire uplands. Examples include Brisbane Glen to the north of Largs, the Stinchar Valley and its tributary the Duisk Water Valley, and the upper reaches of the Water of Girvan Valley.
- 5.139. The solid geology of these valleys is varied. Brisbane Glen is carved along the boundary between Millstone Grits and Basalts, while the Stinchar Valley and upper part of the Water of Girvan Valley lie in the complex area along the Southern Uplands Fault zone. The Stinchar Valley includes a dramatic volcanic plug, Knockdolian Hill, which dominates the lower part of the valley.

- 5.140. For the most part, these are medium to small scale valleys with steep slopes but relatively flat valley bottoms. Land cover is dominated by the structure of broadleaf woodland which includes shelterbelts, riparian woodland and policy woodlands and which separates the valley pastures into small parcels of fields. Other field boundaries tend to comprise drystone dykes and some hedges. The edges of more extensive coniferous plantations are visible along the upper slopes of the valleys.
- 5.141. Although the valleys contain few designed landscapes, there are a number of hill forts, hilltop cairns, castles and strongholds. Settlement comprises a dispersed scatter of houses and farms, with a small number of settlements, often located at key bridging points. Many buildings comprise whitewashed harl with slate roofs.

### Forces for change

- 5.142. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.143. **Agriculture:** the pattern of lush pastures, hedges, hedgerow trees and shelterbelts is an essential feature of this landscape type, providing contrasting textures and colours when compared with the moorland hills to north and south.
- 5.144. **Woodland:** trees, in the form of shelterbelts and field boundary trees also make an important contribution to the landscape. These features are potentially vulnerable unless shelterbelts are maintained and trees are replaced when they are felled. Some areas of coniferous woodland extend into the valleys from surrounding high ground. This generally sits comfortably in the landscape, though larger scale forestry would generally be inappropriate. Felling and replanting will provide an opportunity to improve the appearance of existing plantations.
- 5.145. **Development:** settlements are generally small scale, and in keeping with the character of the local landscape. Within the southern part of Brisbane Glen there has been some suburban development associated with the growth of Largs. Any additional development should be carefully considered in the context of the rural valley, where possible adopting and adapting more traditional designs and materials.

## **Management and Planning Guidelines**

- 5.146. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the small scale, pastoral character of these valleys and to maintain the contrast with surrounding uplands. Maintaining the balance of broadleaf woodland and pastures should be a key objective.**

### **Agriculture**

- encourage farmers and landowners to maintain and, where appropriate, to replant hedges and hedgerow trees;
- explore the opportunities to increase woodland cover by creating new woodland belts where there is a need to screen development;
- hill farming should be maintained on higher slopes as an important feature of the landscape;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### **Forestry and Woodland**

- encourage a phased programme of replanting, managing and, where necessary, felling hedgerow trees and shelterbelts, so as to maintain and restore the historic legacy of trees;
- conserve riparian woodland and wetland corridors;
- encourage the planting of new tree lines;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts in the most open areas;
- retain and manage surviving pockets of semi-natural woodland;
- there should be a general presumption against large scale extension of existing forest blocks into the valley;
- adopt a planting strategy that emphasises the important characteristics of the landscape and includes:
  - expansion/regeneration of native woodlands;
  - mixture of broadleaf and conifer species;
  - use of new planting to soften existing plantations;
  - small coupes to reflect the small scale of the landscape;
  - concentration of new woodland on steeper slopes, and around the lower slopes;
  - retention of key views;
  - overall balance of open to wooded land to favour the valleys' pastoral character;

- with respect to the replanting of existing plantations on valley slopes:
  - encourage the rationalisation of woodland to avoid isolated, small to medium sized areas of plantation woodland which appear very prominent in an otherwise open landscape;
  - adopt a more naturalistic appearance, responding to the landform and features such as burns, gullies and crags;
  - create graded and irregular upper margins allowing views of upper slopes from within the valley;
  - employ more varied species mixes;
  - vary the size of felling coupes, with smaller areas on lower slopes.

#### ***Recreation***

- focus recreation activities and the provision of new facilities at existing centres;
- maintain low-key level of provision;
- support small scale, low-key tourism or recreational development.

#### ***Development***

- discourage suburban type development in these areas;
- discourage isolated developments in the open landscape;
- encourage new development to re-inforce the existing settlement;
- encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles. Avoid standard designs and layouts;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- discourage large scale built developments.

#### ***Tall Structures***

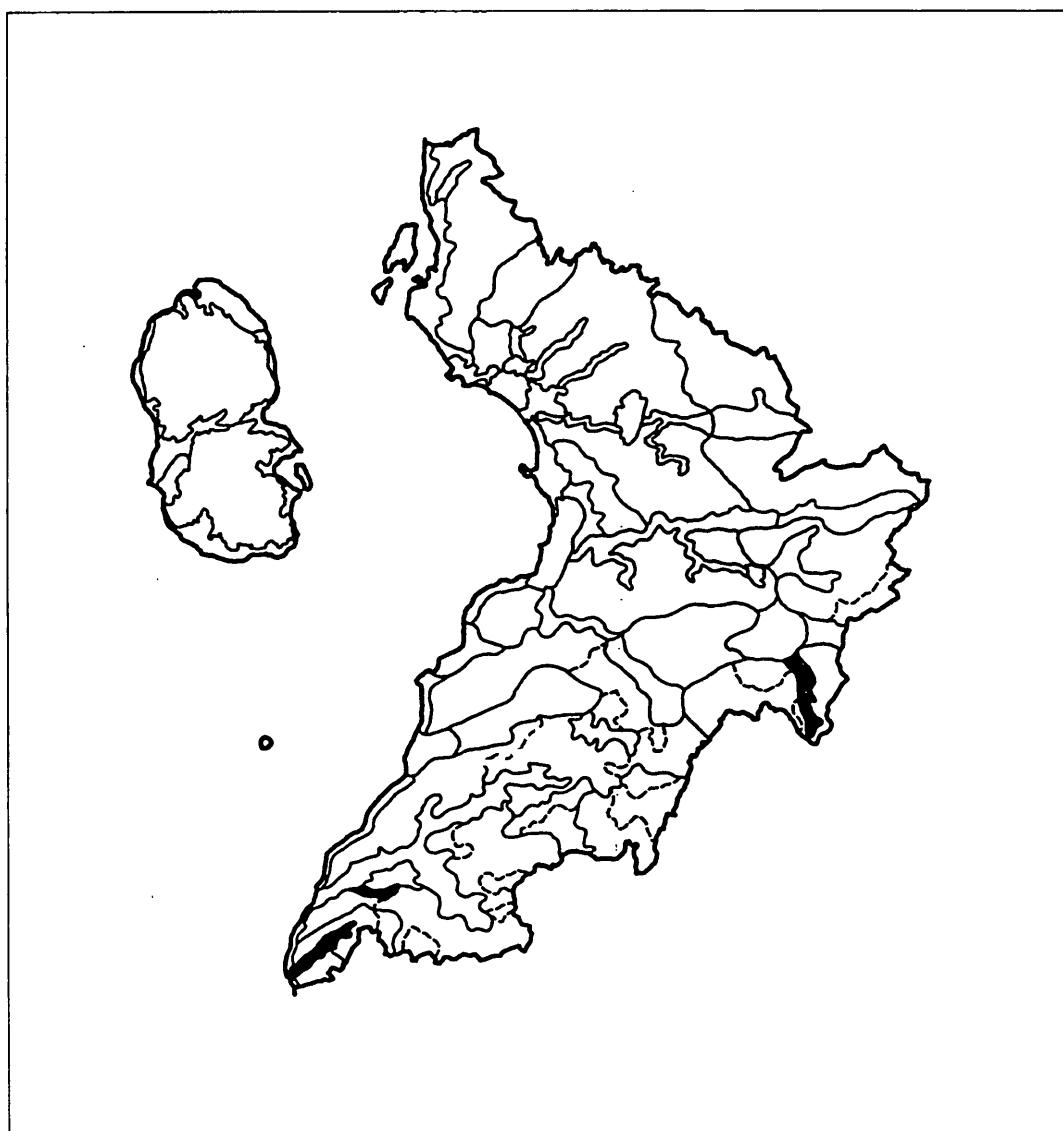
- assess any proposals for aerials, masts or other tall structures in terms of their visual and landscape impact on the small scale nature of the valley landscape;
- encourage any wind power developments to locate away from valley sides;
- underground cable solutions should be considered in preference to pylon lines.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- ensure road engineering works preserve the informal character of the valley roads;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.



## N: UPLAND GLEN



- 5.147. Distinctive Upland Glen landscapes have been created where glacial erosion has enlarged river valleys draining the Southern Uplands. There are three particular examples, the valley of the Afton Water, immediately to the south of New Cumnock, and Glen Tig and Glen App, draining to the Ayrshire coast, close to the boundary with Dumfries and Galloway.
- 5.148. The solid geology of the glens is similar to the enclosing Southern Uplands, comprising sedimentary greywackes and shales of the Ordovician period. The process of glacial erosion has created a distinctive valley profile comprising steep, often craggy valley slopes, and a rounded valley floor, containing a comparatively small 'misfit' river. Fast flowing rivers cut into morainic deposits left by retreating ice sheets on the valley floor.

- 5.149. Valley floors, together with some of the shallower and lower valley slopes, comprise improved pastures, enclosed within drystone dykes constructed from glacially rounded boulders. The pastures give way rapidly to rough grassland and heather moorland on slopes above the valley floor. Broadleaf woodland is scarce, usually comprising lines of trees tracing the course of the river, a few field boundary trees and small farm woodlands. Small to medium scale coniferous plantations are found on the valley slopes.
- 5.150. Modern settlement is limited, mainly confined to a scatter of stone farmsteads, many of which are on historic sites. Most roads are minor. The valley of the Afton Water contains the Afton Reservoir and associated water treatment facilities. Glen Tig is particularly remote in character, accessible only on foot, though it can be seen from nearby minor roads. While retaining a 'wild' upland character, it is also quite intimate in scale. The glen is narrow, steep sided and characterised by belts of semi-natural, broadleaf woodland along its lower slopes.

### Forces for change

- 5.151. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.152. **Agriculture:** upland farming plays an important role in maintaining the landscape of these valleys.
- 5.153. **Woodland:** coniferous forestry extends from higher ground into these valleys. The plantations are well established and there will be opportunities to achieve more effective integration with the distinctive glacial valley landscapes as the forests are harvested and replanted. Currently unplanted areas of the Afton valley is described by the Strathclyde Indicative Forestry Strategy (Strathclyde Regional Council, 1988) as being unsuitable for large scale forestry. Glen App, on the other hand, falls into a 'potential' area, so it is possible that additional afforestation proposals may come forward.
- 5.154. **Development:** modern development in these valleys is limited. The principal exception is the water infrastructure associated with the Afton Reservoir. This has a modern, industrial appearance that contrasts with the character of the surrounding, upland landscape.

### Management and Planning Guidelines

- 5.155. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the distinctive upland character of these glens, minimising the impact of development on land uses such as forestry.**

### ***Agriculture***

- discourage further improvement of pastures and promote nature conservation of grasslands;
- encourage the conservation of dry stone dykes in local stone;
- hill farming should be maintained as an essential feature of the landscape;
- maintain hedgerow trees;
- maintain the distinction between lowland improved pastures and rougher grazing on valley sides;
- support creation of semi-natural regeneration areas where grazing no longer continues;
- support heather management (muirburn) schemes;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### ***Forestry and Woodland***

- conserve riparian woodland and wetland corridors;
- encourage small scale woodland planting with appropriate regard to contours;
- encourage the integration of broadleaves and conifers on a small to medium scale, prevent encroachment of large forests;
- explore opportunities to modify management practices to allow the regeneration of native woodlands on some valley slopes, to create the 'natural' transition from valley woodland, through dwarf alpine woodland to the vegetation of the upland summits and plateaux;
- use new planting to create a framework to absorb recent farm developments in the open countryside;
- discourage the creation of additional areas of coniferous forestry within the upland valleys;
- encourage the removal of small, geometric plantations;
- implement a phased programme of felling, redesign and replanting of existing plantations to reduce the adverse impact on the environment;
- forest restructuring should seek to 'expose' and preserve cultural features such as walls and archaeological ruins;
- link new woodlands to lowland shelterbelts, glen woods and farm woodlands, providing broadleaf lower margins;

- maintain present 'untamed' nature of landscape on valley slopes;
- with respect to the replanting of existing plantations on valley slopes:
  - encourage the rationalisation of woodland to avoid isolated, small to medium sized areas of plantation woodland which appear very prominent in an otherwise open landscape;
  - adopt a more naturalistic appearance, responding to the landform and features such as burns, gullies and crags;
  - create graded and irregular margins at the top and bottom of the slope, allowing views of upper slopes from within the valley;
  - discourage straight lateral edges - do not plant up to the edge of a land holding where this creates a strong and geometric vertical line;
  - employ more varied species mixes;
  - vary the size of felling coupes, with smaller areas on lower slopes.

#### ***Recreation***

- maintain low-key level of provision;
- support small scale, low-key tourism or recreational development.

#### ***Development***

- discourage development in the upland landscape;
- where development is permitted, encourage construction to consolidate existing villages, hamlets or groups of farmbuildings, and favour sheltered locations;
- where development is permitted, ensure that buildings are located so as to minimise their impact on the landscape (utilising any natural screening provided by the landform) and that they adopt vernacular styles, building materials and colours.

#### ***Tall Structures***

- the intimate scale and distinctive largely undeveloped upland character means that tall structures located either within or visible from these glens would have a significant influence on landscape character. They should, therefore, be discouraged.

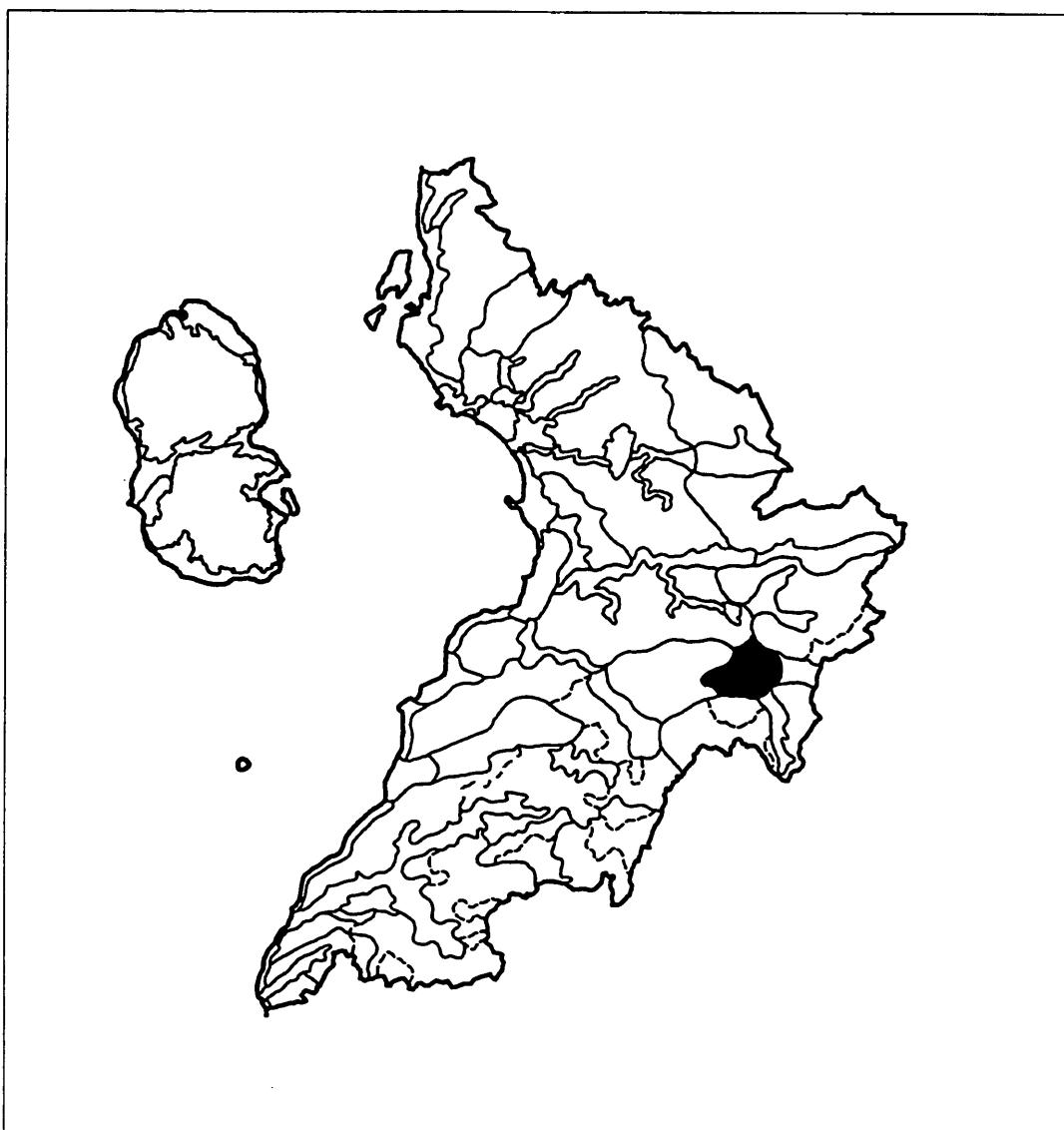
#### ***Transport***

- where roads exist, develop a road use hierarchy as a basis for management;
- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape;
- ensure road engineering works preserve the informal character of the valley roads;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;

- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.



## O: UPLAND BASIN



- 5.156. To the north and west of New Cumnock, the headwaters of the River Nith have created an open basin at the foot of the Southern Uplands and partially enclosed by foothills and moorland plateau to the north west and north east respectively. Underlain by a mixture of millstone grit, limestone and coal measures, and immediately to the north of the main Southern Uplands Fault, the landform is shallow and subdued, comprising a series of low, smooth ridges and troughs. Small lochs fill some of the shallow troughs. Viewed from the north, the Southern Uplands rise as a steep wall behind the basin.
- 5.157. At about 200 metres AOD, the basin is comparatively elevated and exposed, qualities that are reflected in the generally unwooded character of the landscape, and in the wind-trimmed canopies of those hedgerow trees that do grow. Most field boundaries are marked by drystone dykes (often constructed from glacially rounded boulders) or gappy hawthorn hedges.

- 5.158. Within this exposed upland landscape, development is often very visible. New Cumnock, for example, has experienced considerable growth during the 20th century, stimulated by the growth of the coal industry. Many of the houses are modern and suburban in design (white rendered walls with orange pantiles) and are located in comparatively prominent locations, with little or no screening. The result is that the settlement is a very visible feature within the wider landscape. Older buildings, by contrast, are often built of grey stone with slate roofs, and tend to retreat into the landscape.
- 5.159. Mineral extraction, particularly coal mining, has had an important influence on the landscape of the upland basin. Areas of derelict or damaged land, old railway lines, and the pattern of development all comprise the legacy of the area's industrial past. Open-cast coal workings to the west of New Cumnock provide a continuing industrial influence and will result in significant changes in the area's landscape.

### Forces for change

- 5.160. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.161. **Agriculture:** much of the upland basin is in agricultural use, with improved pastures enclosed by a mixture of hedges and drystone walls. The latter are constructed of large rounded boulders, a building material common in the upland areas. Field boundary trees are few. Farming appears to be relatively stable, though it is likely to be less prosperous in this upland area than in the more sheltered lowlands.
- 5.162. **Woodland:** deciduous woodland is very limited in this exposed, upland landscape. Coniferous plantations are visible where they extend into the fringes of the basin from surrounding areas of higher ground. The Strathclyde Indicative Forestry Strategy indicates that the basin forms part of the 'preferred' area for new forestry planting, so it is likely that further planting proposals will come forward in due course. There may be opportunities to use the creation of new plantations to reduce the landscape impact of existing settlements, and to enhance areas of damaged or degraded land.
- 5.163. **Development:** 20th century settlement growth in this landscape type has had a significant effect as a consequence of the the openness of the landscape (and the resulting prominence of buildings within it) and the location and building materials selected for new development. Other issues arise where localised industrial development created a dispersed settlement pattern. With the decline of industry, many of these settlements (often no more than a row of semi-detached houses, or a schoolhouse) have lost their raison d'être and are suffering physical decline. Alternative land uses, for example the reintroduction of crofting, could provide the means of sustaining the rural economy in such places. These issues also affect the Upland River Valley (J) and Foothills (Q) landscape types where they occur in areas adjacent to the basin.

- 5.164. **Minerals:** the upland basin is underlain by coal measures, reflected in the historic, small scale exploitation of coal resources and present open-cast coal workings. Like built development, open cast workings could have a significant visual impact in this open landscape. Current sites, however, make effective use of topographic and planted screening to reduce this impact.
- 5.165. **Wind power:** although enclosed by rising hills to the east, west and south, it is possible that the open and exposed nature of this basin would make small-scale wind development viable, particularly where it is linked to local use. It could, therefore, form part of a strategy designed to sustain the rural economy and population. However, this would need to take account of the cumulative impacts associated with the existing wind farm at Windy Standard and others in the area.

## **Management and Planning Guidelines**

- 5.166. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to enhance the semi-upland character of the basin and to address the effects of past or present industrial activity.**

### **Agriculture**

- discourage improvements which result in loss of field boundaries or field boundary trees;
- encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- explore the opportunities to increase woodland cover by creating new woodland belts, where there is a need to screen development;
- maintain and reinstate hedgerows and hedgerow trees where appropriate;
- maintain pastoral landscape; and support schemes which enhance nature conservation values of grasslands;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### **Forestry and Woodland**

- encourage small scale woodland planting;
- encourage the integration of broadleaves and conifers on a small to medium scale;
- seek to create a more effective transition from afforested to unwooded landscapes through the planting of native species appropriate in ecological and topographical terms, and by replacement of conifers at rotation;
- use new planting to create a framework to absorb earlier development in the open countryside and other visually intrusive features;

- cultural features, particularly mining relics, should not be obscured by forestry;
- ensure the sensitive integration of new forestry; avoid afforestation of dramatically sculpted landforms;
- forestry restructuring for spatial, age, species and wildlife diversity should be progressed;
- general presumption against large scale extension of existing forest blocks into the basin;
- implement a phased programme of felling, redesign and replanting of existing plantations to reduce the adverse impact on the environment.
- adopt a planting strategy that emphasises the transitional character of the landscape and includes:
  - expansion/regeneration of native woodlands;
  - mixture of broadleaf and conifer species;
  - concentration of new woodland on steeper slopes, and around the lower slopes;
  - retention of key views;
- take proactive steps to extend woodlands around future quarry or mine sites.

#### *Recreation*

- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments;
- support small scale, low-key tourism or recreational development, particularly where related to the area's cultural or natural heritage.

#### *Development*

- adopt design requirements for new building, possibly incorporating shelterbelt planting around isolated buildings;
- new building should respect the sparse density of settlement in parts of the area and should have regard to traditional styles;
- apply strict development control to ensure approach road corridors are framed by only high quality, sympathetic developments;
- consider positive ways of addressing the interface between settlements and the surrounding countryside. These could include:
  - gateways and approaches;
  - key vistas and views;
  - landmark features;
  - new buildings which address surrounding areas;
  - screening;

- discourage isolated developments in the open landscape;
- encourage new development to re-inforce the existing settlement;
- discourage the simplistic grafting of housing estates on to the edge of settlements. Encourage more imaginative schemes which respond to the existing patterns of layout, structure, massing, materials and scale while allowing for modern interpretations of traditional styles;
- consider the preparation of design guides as supplementary planning guidance;
- encourage the appropriate conversion of redundant buildings in the countryside to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments in this open landscape;
- provide soft landscape frameworks in advance of building developments to accommodate urban expansion;
- support and promote economic regeneration and high quality building and environmental developments to halt perceived air of abandonment in former industrial areas.

### ***Minerals***

- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals;
- monitor future demand for mineral working. Ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation;
- support selective reclamation of derelict mining sites but retention of key features;
- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character.

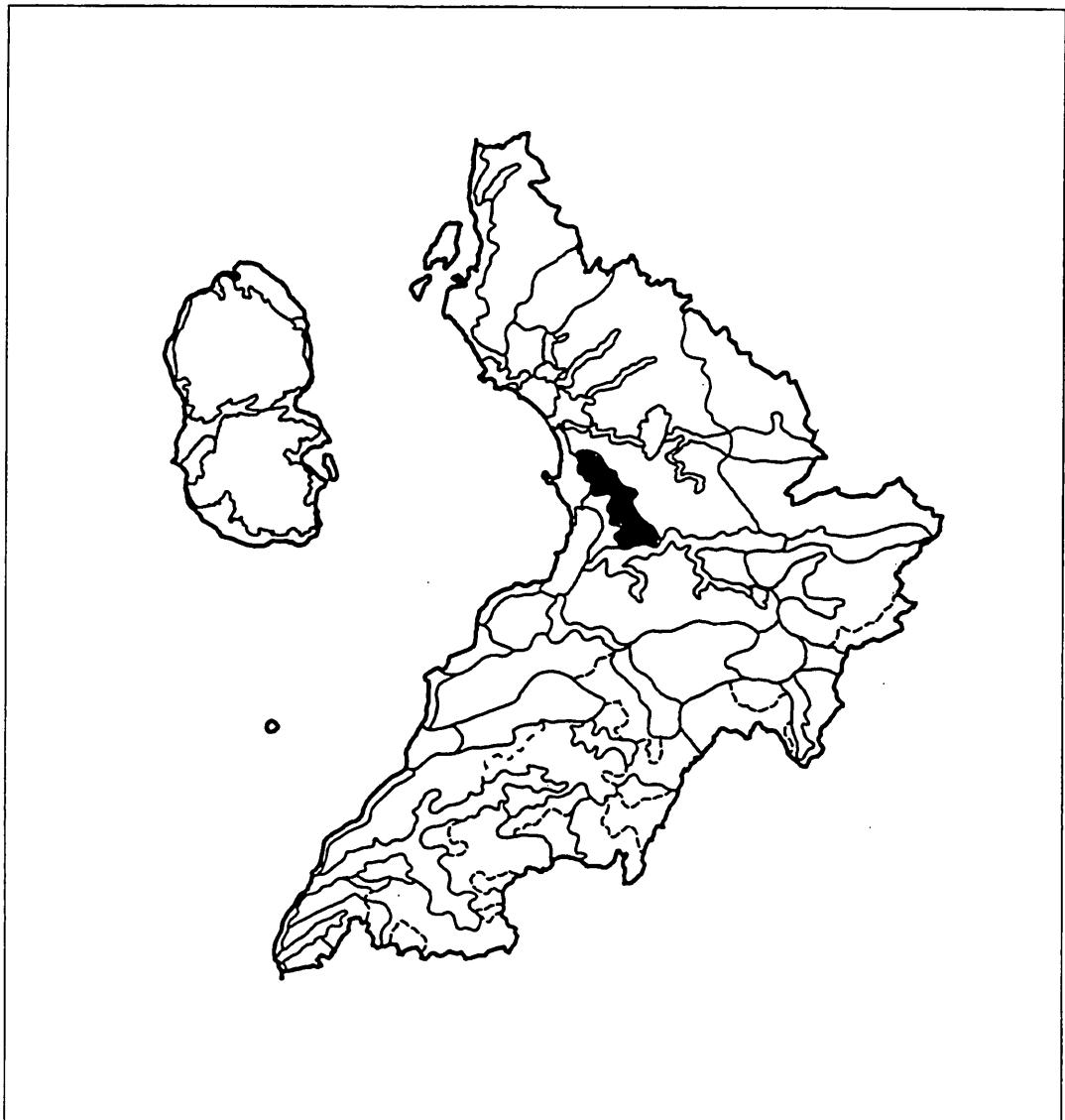
### ***Tall Structures***

- this is an open landscape, with extensive views across the basin to the rising ground that encloses it, so any tall structures would be very visible;
- any proposals for wind farms should be assessed in terms of the cumulative and sequential landscape effects associated with other developments, including those outwith Ayrshire;
- there may be opportunities for small scale wind energy schemes to meet local needs, particularly where this forms part of a strategy designed to maintain declining rural communities.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- where road improvement schemes take place, ensure that drystone walls, hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are re-instated;
- preserve disused railway lines as heritage features and promote as footpath/cycle-routes where appropriate.

## P: LOWLAND HILLS



- 5.167. In the heart of the Ayrshire lowlands lies a series of low hills which rise almost imperceptibly from the surrounding pasturelands, culminating in a series of fluffy summits inland from Troon. Of mixed geology, the hills reflect the presence of igneous intrusions in the surrounding coal measures.
- 5.168. Although the hills are low, standing at just under 150 metres AOD, and most slopes are comparatively gentle, the hills are a significant feature in the landscape, contrasting with the coastal lowlands and cutting them off from much of the lowland basin. Land cover is dominated by pastures, enclosed with hedges (many with gorse) and post and wire fences. The fluffy summits and the steeper slopes tend to be covered in gorse.

- 5.169. Historically, the hills would have provided defensible sites in an otherwise lowland landscape. Some of the hills are crowned with the sites of forts, while Dundonald Castle lies on the hills' northern slopes. More recently the hills have been exploited as a source of hard rock and as a location for reservoirs and communications masts.

### Forces for change

- 5.170. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.171. **Agriculture:** the pattern of dairy farming which characterises the Ayrshire lowlands extends over much of the lowland hills. The exposure created by the elevation and proximity to the coast is reflected in the poorer soils, the presence of gorse in hedges and craggy summits, and in the declining network of field boundaries. Many hedges have become gappy, while others have been entirely replaced by less visible post and wire fences.
- 5.172. **Development:** most settlement has avoided the more exposed parts of these hills in favour of more sheltered locations around their fringes or on the coastal lowlands. However, a number of communications masts, exploiting the elevated position at the centre of the basin, have been developed on prominent hill tops. Pressure for additional masts may increase with the continued growth of telecommunications.
- 5.173. **Transport:** the hills are crossed by the dual carriageway A77 before it descends towards Prestwick and Ayr. This major communications route carries considerable volumes of traffic, creating visual and aural impacts on the surrounding landscape.
- 5.174. **Minerals:** a number of hard rock quarries exploit the igneous rocks of the lowland hills. These inevitably have a local landscape impact, but also affect the wider landscape where the excavations, or the spoil tips break the skyline.
- 5.175. **Wind power:** there may be some potential for wind power development on the lowland hills, though this could have a visual influence over a considerable part of the Ayrshire basin.

### Management and Planning Guidelines

- 5.176. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of these strategies should be to maintain the contrast between the hills and surrounding lowland pastures and coast, and to prevent development which adversely affects their skylines.**

### ***Agriculture***

- maintain and reinstate hedgerows and hedgerow trees, encouraging farmers and landowners to replant trees along field boundaries, initially along roads, but also between fields;
- maintain pastoral character of much of this landscape type, but conserve the present ‘untamed’ nature of hilltops;
- explore the potential for grassland management to enhance nature conservation values;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. This is particularly important given the elevation and prominence of the hills in this otherwise open landscape.

### ***Forestry and Woodland***

- encourage the planting of new tree lines along field boundaries;
- retain and manage surviving pockets of semi-natural woodland and scrub;
- use new planting to create a framework to absorb earlier development in the countryside including quarries, associated spoil tips and the A77 trunk road corridor;
- take proactive steps to extend woodlands around future quarry sites.

### ***Development***

- apply strict development control to ensure approach road corridors are framed by only high quality, sympathetic developments;
- discourage isolated developments in the open landscape and encourage consolidation of the existing settlement pattern;
- encourage developers to use local building materials and to adopt local vernacular in respect of density, massing, design, colour and location while allowing for modern interpretations of traditional styles. Avoid standard designs and layouts.

### ***Minerals***

- discourage additional mineral working where it affects skylines or has a prominent visual influence on key viewpoints, including the A77 and settlements around the hills;
- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals; cognisance of hill-top archaeological sites should be demonstrated;
- monitor future demand for mineral working. Ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation;

- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character.

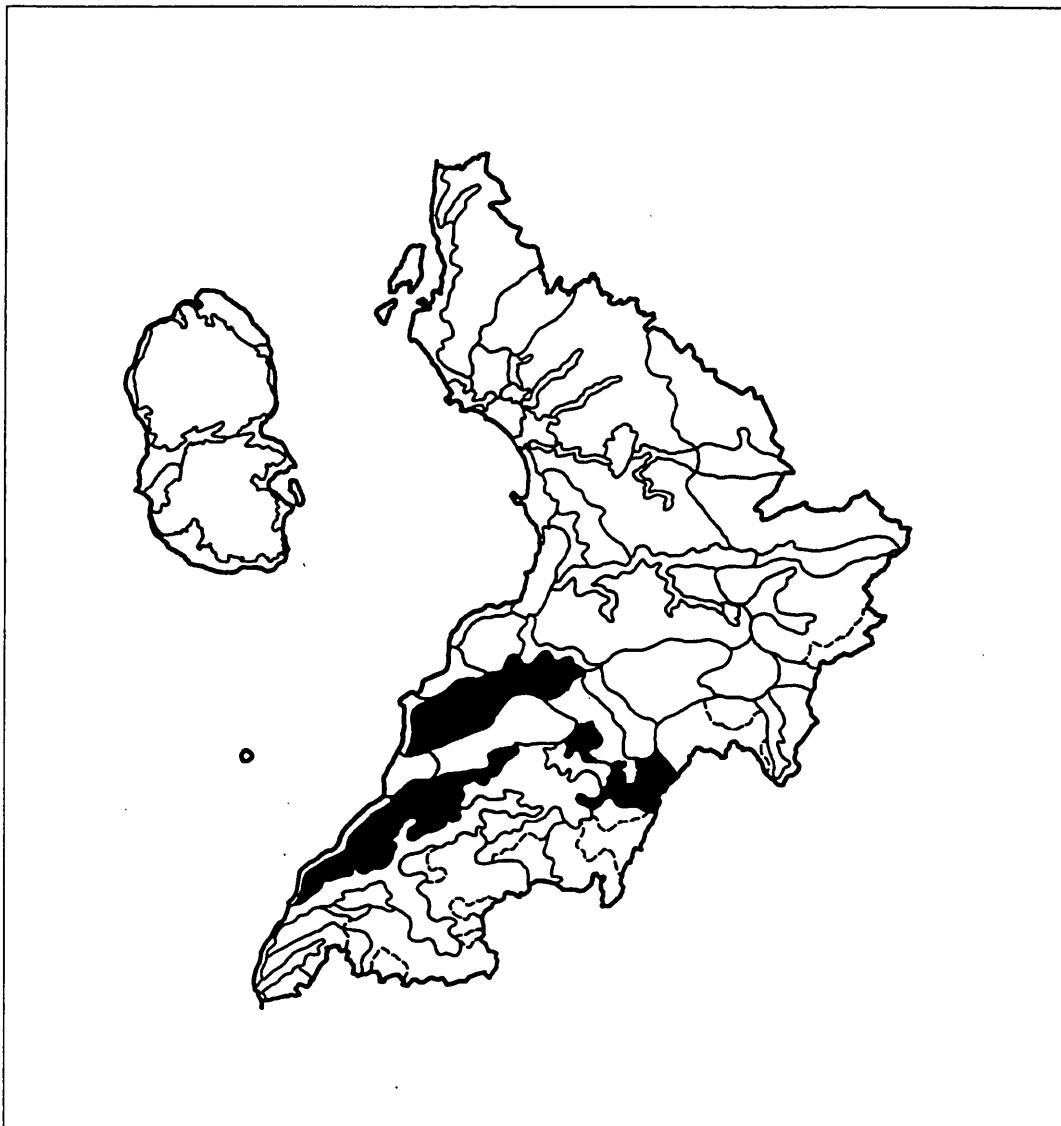
### ***Tall Structures***

- assess any proposals for aerials or masts in terms of their visual and landscape impact;
- encourage telecommunications companies to share facilities where it is evident that this would reduce the overall landscape impact;
- some limited potential for small scale wind power development which would not compromise the rural character of the hills;
- underground cable solutions should be considered in preference to pylon lines, cable tracks should ideally follow hedgerow lines but minimise disturbance of mature trees.

### ***Transport***

- develop road corridor strategies to guide management and enhancement of roadside features and to control developments that may influence the character of road and landscape;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- encourage on-site and off-site planting to better integrate major roads into the landscape and to provide screening of traffic;
- ensure that further proposals for improvements such as dualling or the provision of grade separated junctions are assessed in terms of their wider landscape impact. Where major, unmitigatable impacts exist, explore alternative solutions including traffic management and traffic calming;
- where road improvement schemes take place, ensure that hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are reinstated.

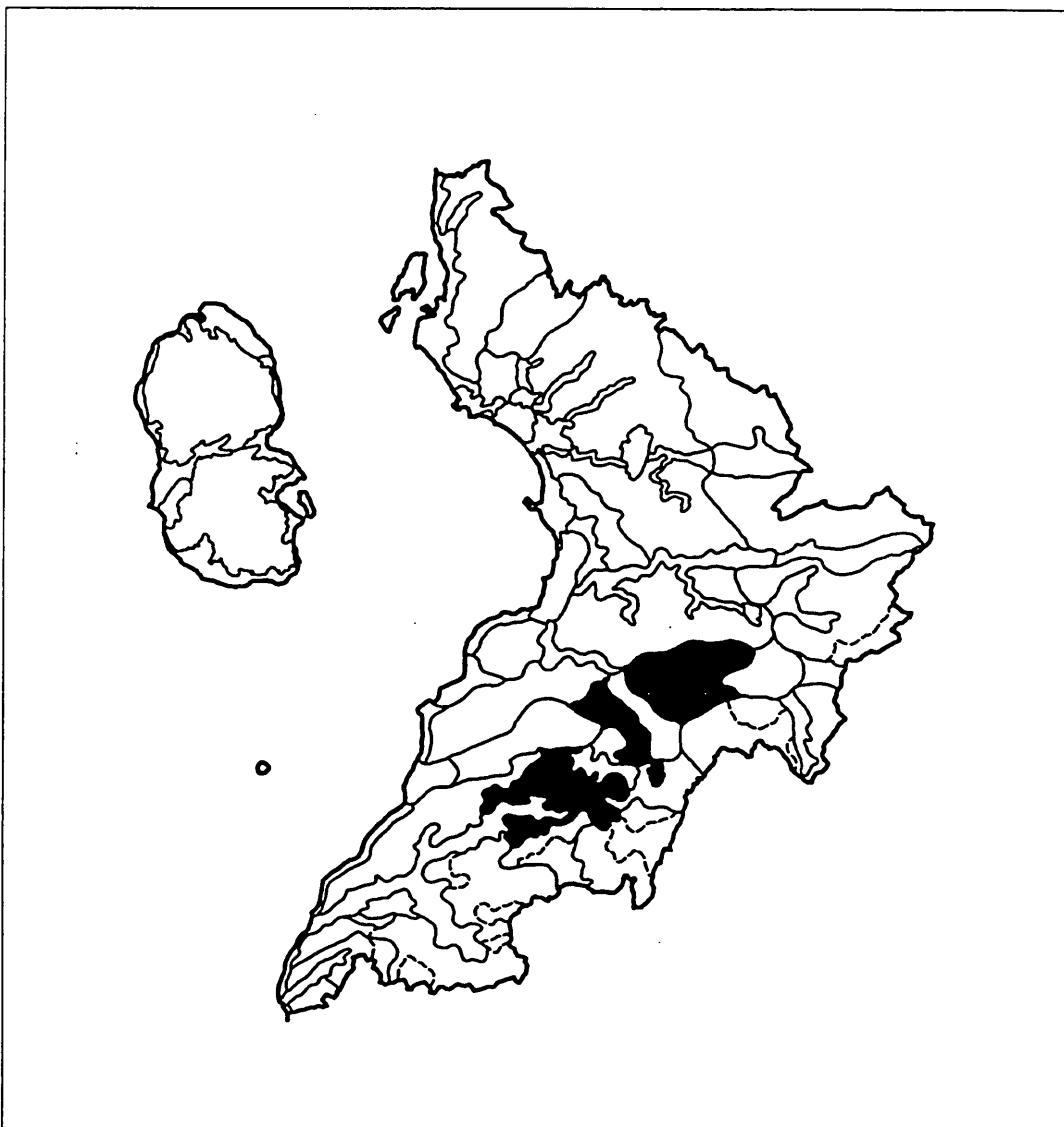
## Q: FOOTHILLS



- 5.177. The Ayrshire Foothills comprise a series of hills which form the transition between the higher Plateau Moorland (R), Southern Uplands (T) and Rugged Granite Uplands (U), and the more sheltered and settled Ayrshire Lowlands (G). The Foothills comprise a large area, extending eastwards from the coast between the Stinchar Valley and Brown Carrick Hill as far as the Upper Nith Basin. 'Foothills with Forest' represents a *sub-type* of this landscape type (see para. 5.186.)
- 5.178. The area is cut by a number of principal valleys, including the Water of Girvan, the Doon and the Stinchar. A larger number of minor valleys cuts into the foothills, creating a dissected landform of incised valleys between rounded ridges and plateaux occasionally rising to undramatic summits, c.300m. These frequently have a slightly conical form with long shoulder slopes.

- 5.179. The Foothills are underlain by red sandstones in the west and coal measures in the east. The south westerly orientation of fault lines and the distribution of geology have strongly influenced the topographic patterns, particularly in the western and southern parts of the landscape type. The line of the South Upland Fault Ridge is echoed in the alignment of the Stinchar Valley, while further north the distribution of sedimentary rocks has been influenced by tectonic movements and also has a south-westerly orientation determining the alignment of the Water of Girvan.
- 5.180. The Foothills exhibit a variety of landcover types, tending to reflect comparatively minor differences in elevation or exposure. The lower slopes typically have a pastoral character with medium sized fields, enclosed by fences, hedges (many of which have become gappy or outgrown) and sometimes dry stone dykes. With increasing altitude, the proportion of rougher grazing rises, with the summits dominated by moorland vegetation with occasional drystone dyke boundaries, or extensive areas of coniferous forestry.
- 5.181. The eastern part of this area, comprising the south eastern part of the Ayrshire Coalfield, has been substantially affected by coal mining. Historically, deep mining predominated, albeit often on a relatively small scale. The area running between Dalmellington, Waterside and Rankinston on the eastern side of the Doon Valley has many relics of coal, limestone, and iron ore extraction including bings, inclines and disused railways. Coal mining continues in the form of very large scale open-cast mining operations. Examples can be found above Dalmellington and west of New Cumnock. The landscape change brought by open-cast working is considerably greater than that associated with the smaller scale operations which took place in the 19th century and the first half of the 20th century.
- 5.182. Modern settlement within this landscape type is generally very limited as farms and villages tend to be sited in the more hospitable valleys and lowlands. The principal exception is the string of isolated settlements found along the B741 between Dalmellington and New Cumnock. Sited in a shallow valley between the Southern Uplands and the low summits of the Foothills, many of these settlements are industrial in origin, associated with the pits and coal workings which today are visible as little more than grassy bings linked by disused railway embankments. Many of these settlements having declined with the closure of pits, and isolated rows of workers houses and isolated school houses now appear slightly out of place in this otherwise open, upland landscape.
- 5.183. Patterns of historic settlement suggest that the environment has not always been so harsh. The remnants of historic settlement patterns, based upon rig and furrow fields enclosed by turf dykes and centred on large individual farmsteads are still evident in areas that are unsettled and uncultivated today. Many of the placenames associated with these farmsteads are still visible on Ordnance Survey maps today. An example is Benquhat located at about 400 metres AOD above Waterside in the Doon valley. The elevation of such field systems indicates that they date back to the periods of milder climate that prevailed around the 16th century. Many of the historic field patterns have been lost beneath plantations or open-cast workings. The surviving examples, however, illustrate the pattern of land holding that would have prevailed across much of Ayrshire.
- 5.184. Building material reflects both the variations in underlying geology and the era of development. While sandstones and harder, often whitewashed, building stones predominate in the west, in the east more modern and industrial materials such as brick, white render and pantiles or concrete tiles are more common, reflecting the industry related development that took place until the middle of the 20th century.

## **Q(b) Foothills with Forest**



- 5.185. Foothills with Forest landscape type is closely related to the Foothills landscape type (see para.5.178.), but has predominantly forest land cover which creates its forest-dominated character.
- 5.186. Dark swathes of almost uniform dark green cover many of the rounded peaks and descend on to the lower slopes. The different stages of forest rotation can typically be experienced within short distances where mature conifers contrast with the raw appearance of young planting on the hillside. The aftermath of clearfell often appears chaotic. Deep ploughed slopes prepared for planting create a 'scarred' effect. Design improvements are evident in many areas, e.g. deciduous fringes, informal edges, feathering on high slopes. Open ground is mostly rough or semi-improved pasture with patterns of dry stone dykes. In higher areas the underlying pastures are rougher and often unenclosed. The latter are obscured by forest in areas as are some archaeological remains. Occasionally, breaks in the tree cover reveal old stone enclosures and forts. 'Recreational' forests are also found in this landscape type, with tourism facilities and waymarked trails now integrated into the forests.

## Forces for change

- 5.187. In this section we describe the principal types of change that have affected these landscape types in the recent past or which are likely to affect them in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.188. **Woodland:** though with a lower proportion of woodland than in parts of the plateau moorland, this is another landscape type which has been subject to extensive coniferous afforestation over the present century, particularly in some of the more remote parts of southern Ayrshire. This landscape type lies within the areas described as being preferred or having potential for new planting in the Strathclyde Indicative Forestry Strategy. It is likely therefore, that this area will come under continued pressure for additional plantations. Implementation of the Forestry Commission's forestry design guidelines should result in an improvement in the visual quality of these new forests, and in the replanting of existing plantations. There is, however, a need to review the overall balance of open land to woodland within this landscape type before the balance extends too far towards forestry.
- 5.189. **Development:** settlement within this landscape type is generally limited to a scatter of small villages and farmsteads. Maybole is the only settlement of any size. Development pressures appear to be comparatively low, though the past pattern of development has left some intrusive elements. A number of villages have expanded by the addition of suburban housing, often located in prominent sites and employing locally unsympathetic materials. The northeastern edge of Kirkoswald provides an example of urban designs sitting uncomfortably in the countryside. Other problems arise where localised industrial development created a dispersed settlement pattern. With the decline of industry, many of these settlements have lost their raison d'être and are suffering physical decline. Alternative land uses, for example the reintroduction of crofting, could provide the means of sustaining the rural economy in such places. As noted above, these issues also affect the Upper River Valley and Upland Basin landscape types.
- 5.190. **Minerals:** the area of foothills between the Doon Valley and the upland basin formed by the headwaters of the River Nith is underlain by coal deposits. The fringes of this area have been subject to coal working at a variety of scales, and many of the valley slopes are characterised by inclines, the remains of pithead structures and bings of different sizes. More recent coal working has taken the form of open-cast operations, most obviously on high ground above Dalmellington, but also on the fringes of the Upper Nith Basin. The open-cast excavation, coal storage areas, haul roads, site compounds and access roads can all have an impact on the landscape.
- 5.191. **Wind power:** it is likely that large parts of the foothills have potential for wind power development, though this is likely to be constrained to some extent by the availability of connections into the power distribution system. All other things being equal, it would be logical to steer wind farm development to those parts of the plateau moorlands already affected by mineral working, forestry or other developments.

## **Management and Planning Guidelines**

- 5.192. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to retain the foothills' transitional character which is a product of variations in landcover, and the contrast with neighbouring lowlands, valleys and higher uplands.**

### **Agriculture**

- discourage further improvement of pastures, or their conversion to arable;
- maintain the distinction between lowland cereals and highland grazing areas;
- encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- hill farming should be maintained as an essential feature of the landscape;
- maintain present 'untamed' nature of highest parts of the landscape;
- support continuation of moorland grazing, particularly within broad enclosures;
- support creation of semi-natural regeneration areas where grazing no longer continues;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### **Forestry and Woodland**

- adopt a planting strategy that emphasises the transitional character of the landscape and includes:
  - expansion/regeneration of native woodlands;
  - mixture of broadleaf and conifer species;
  - medium sized coupes to reflect the scale of the landscape;
  - concentration of new woodland on steeper slopes, and around the lower slopes;
  - retention of key views;
- encourage small to medium scale woodland planting with appropriate regard to contours;
- encourage the integration of broadleaves and conifers on a small to medium scale, and in a way that links existing woodlands at different altitudes;
- examine the potential to create an integrated pattern of new small woodlands and woodland belts on lower slopes, but which retains the dominant pastoral character of the landscape;
- support semi-natural and broadleaf woodland management and new broadleaf planting schemes in gullies, on scarp slopes and steep valley slopes;
- forest restructuring for spatial, age, species and wildlife diversity should be progressed in the forestry dominated areas;
- forest restructuring should seek to 'expose' and preserve cultural features such as walls, archaeological ruins and field patterns;

- in the higher areas of the foothills a predominance of open ground should be preserved with generally large scale patterns of forest and open ground;
- general presumption against large scale forestry on lower slopes;
- link new woodlands to lowland shelterbelts, glen woods and farm woodlands, providing broadleaf lower margins;
- new forestry proposals should, if possible, be targeted to areas already dominated by forest and with more bland topography of lesser scenic and geomorphological interest;
- new planting should conform to the Forestry Authority's design guidelines. In particular, it should respond to the medium to large scale nature of the landscape, the importance of views within and out of the hills, and historic and ecological values;
- take proactive steps to extend woodlands around future quarry and mineral sites.

### ***Recreation***

- maintain low-key level of provision;
- support small scale, low-key tourism or recreational development;
- encourage the sympathetic restoration and re-use of redundant buildings in the countryside;
- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments.

### ***Development***

- develop strategies for incongruous residential developments of industrial origins which consider remodelling unsympathetic buildings; incremental removal of properties to improve landscape fit; and screen planting;
- consolidate and improve the centres of historic settlements, avoiding linear development along roads;
- produce combined development strategies and design guidance for settlements of particular architectural merit and sensitivity;
- target edge of settlement expansion only where it can be integrated within a woodland framework or landforms;
- encourage the appropriate conversion of redundant buildings in the countryside. Guidance should be provided on the way buildings should be converted (including the provision of drives, gardens etc) to prevent the suburbanisation of the countryside;
- general presumption against large scale built developments;
- where rural development is permitted, encourage construction to consolidate existing hamlets or groups of farmbuildings, and favour sheltered locations.

### ***Minerals***

- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals;

- monitor future demand for mineral working. Ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation;
- support selective reclamation of derelict mining sites but retention of key features;
- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character.

### ***Tall Structures***

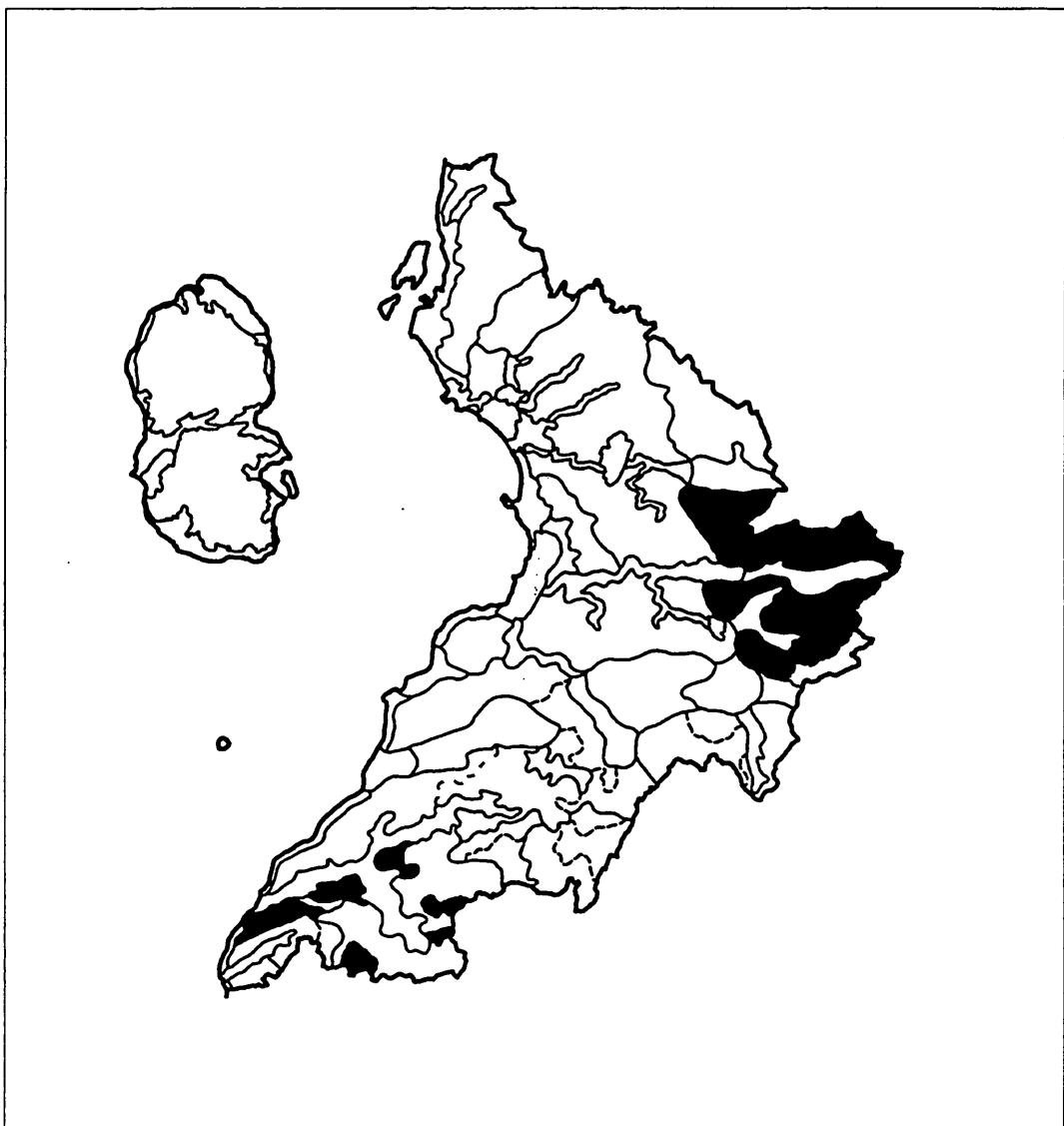
- assess any proposals for aerials or masts in terms of their visual and landscape impact;
- encourage any wind power developments to locate away from skyline locations;
- encourage telecommunications companies to share facilities where it is evident that this would reduce the overall landscape impact;
- planning policies should indicate that medium scale wind power development may be suitable in areas where landform can minimise intrusion and cultural history provides an appropriate context;
- potential siting of wind towers should attempt to use adjacent forested landscapes to aid screening and backclothing;
- underground cable solutions should be considered in preference to pylon lines;
- wind farms may be appropriate within open ground, ideally utilising existing roads, though individual schemes should be subject to thorough landscape and visual assessment at the design stage.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- ensure road engineering works preserve the informal character of the road network;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing;
- where road improvement schemes take place, ensure that drystone walls, hedges and hedgerow trees, together with other features such as milestones, finger posts and gates are re-instated.



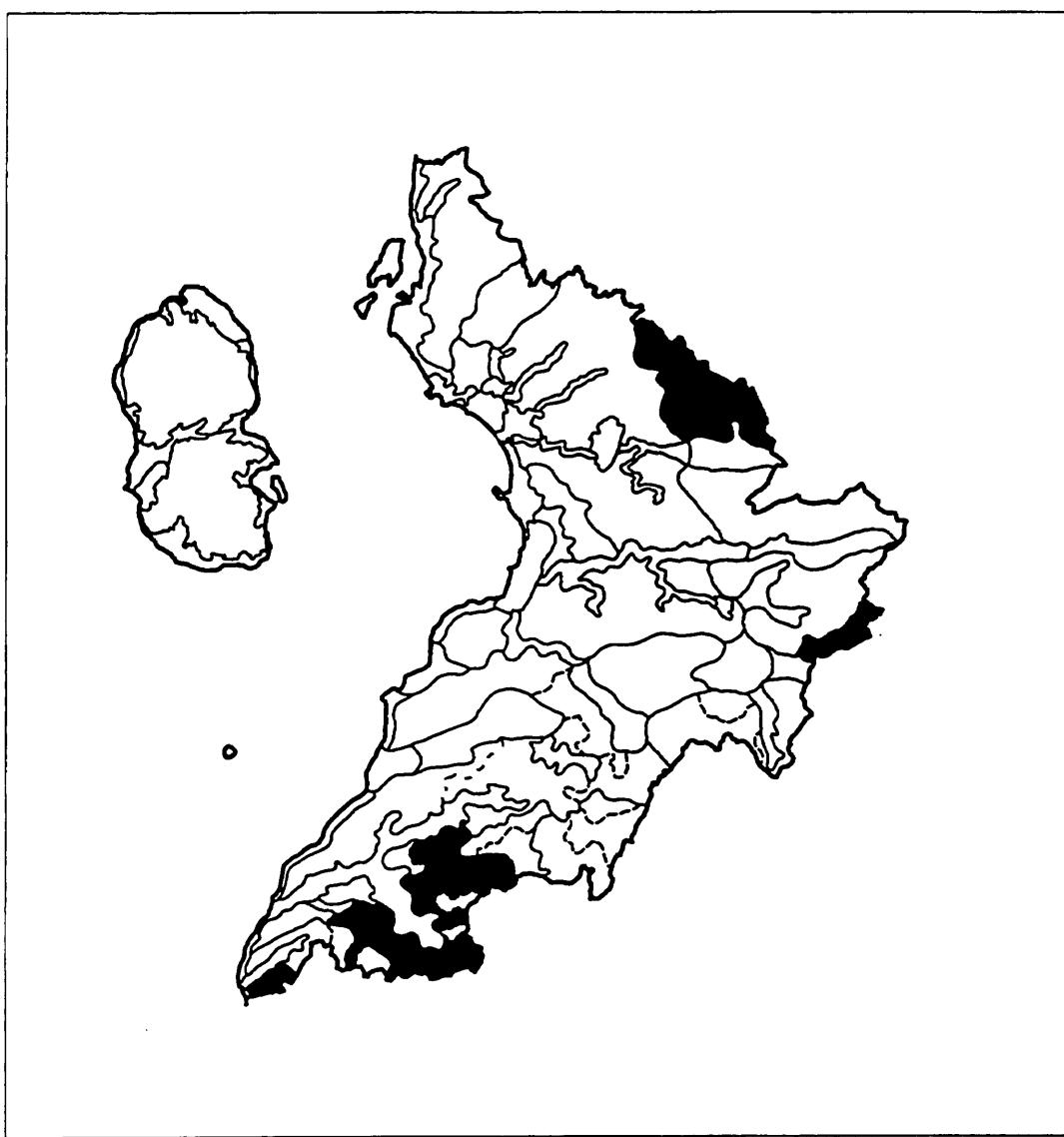
## R: PLATEAU MOORLANDS



- 5.193. Plateau Moorlands occur in two parts of Ayrshire - along its eastern and southern boundaries. Underlain by basalts, they form the extensive ridge which separates the Ayrshire Basin from the Clyde Basin, extending from near the Garnock Valley to Upper Nithsdale. Underlain by greywackes, they form another large area of upland in south west Ayrshire, providing a transition between the foothills and the uplands to the south. Plateau Moorland with Forest represents a *sub-type* of this landscape type (see para.5.197).
- 5.194. The Plateau Moorlands consist of blanket bog, heather and grass moorland, the topography is comparatively level with extensive plateau basins rising to soft contoured ridges. The landscape is of an open, exposed and rather wild character despite occasional isolated hill farms, sheep (and cattle grazing). The landscape type is perhaps exemplified in areas to the north and south of the upper Ayr valley. Mosses, comprising areas of extensive peatland form an important component of this landscape type, occurring for example at Fenwick Moss.

- 5.195. The expansive nature of this landscape would make any development within it highly visible. The Plateau Moorlands are generally free from masts and other tall structures, but where they do occur (even outside study area) they can have quite a wide impact.

#### R(b) Plateau Moorland with Forest



- 5.196. A subset of the Plateau Moorland landscape type (R), the Plateau Moorland with Forest landscape type occurs where significant afforestation has taken place. This sub-type is found in southern Ayrshire and at Whitelee Forest to the north of the Irvine valley. This landscape has ideal physical characteristics for forestry and has been subject to the incremental spread of commercial (Sitka) forest mostly of a 'blanket' nature, as yet little modified by redesign at rotation. This has significantly modified the original character in terms of colour, textures and the length of views possible. The landscape is typified by extensive plantations of uniform age, colour and texture. There is a general lack of elevation which allows the forests to create dark horizons. New plantations appear as dark speckled landscapes from a distance. The open ground and surrounding moorland contrasts in its mosaics of brown and ochre colours. The landscape has an exposed and remote character, although enclosure within the forests can be well defined.

## **Forces for change**

- 5.197. In this section we describe the principal types of change that have affected these landscape types in the recent past or which are likely to affect them in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.198. **Woodland:** in the southern part of Ayrshire, the establishment of extensive coniferous plantations has had a very significant effect on the nature of this landscape type. Well over half the area of Plateau Moorlands in this area is now under conifers. Future rotations and the implementation of the Forestry Commission's forestry design guidelines should result in an improvement in the visual quality of these forests. There is, however, a need to review the overall balance of open land to woodland, particularly in the light of the area's description as a 'potential area' in the Strathclyde Indicative Forestry Strategy.
- 5.199. Similar concerns relate to the Plateau Moorlands along the eastern edge of the Ayrshire Basin. Existing plantations have had a significant influence on the landscape particularly to the north of the Irvine valley. The area between the Irvine and Ayr valleys comprises one of the few areas of open plateau moorland in Ayrshire. The unforested parts of these hills is also described as 'potential areas' in the Strathclyde Indicative Forestry Strategy.
- 5.200. **Development:** as noted above, views over this landscape type tend to be open and extensive meaning that any development is visible over a considerable distance. To date, development has been limited, largely confined to a small number of communications masts.
- 5.201. **Transport:** the largely undeveloped nature of these moorlands is reflected in the sparse network of roads which cross the hills. The principal exception is the A77 crossing between Glasgow and Kilmarnock. Although subject to improvement in the past, this four lane, single carriageway road may be subject to upgrading proposals in the future, particularly since a new motorway section has been opened to the north. It is possible that such changes could include the improvement of existing junctions, or, ultimately, the creation of a dual carriageway with grade separated junctions and embankments and cuttings to allow an alignment which overcomes the existing tight bends. This could have a significant effect on the part of the moorland plateau landscape affected.
- 5.202. **Minerals:** coal measures lie beneath parts of the Plateau Moorlands along the eastern side of Ayrshire. Areas around the Ayr valley, for example, have a history of shallow mining, deep mining and, latterly, pressure for open-cast mining. While the former have declined, to leave a legacy of regenerating bings and related infrastructure around the fringe of the plateau moorlands, open-cast proposals bring the prospect of larger scale landscape change to some of these areas.
- 5.203. **Wind power:** it is likely that large parts of the Plateau Moorlands have potential for wind power development, though this is likely to be constrained to some extent by the availability of connections into the power distribution system. Although this is a large scale landscape, development within the unforested parts of this landscape type could conflict with the untamed nature of the moorlands. It is a simple landscape dominated by

horizontal elements. Modern wind infrastructure would contrast with this character, introducing vertical elements, movement and modern structures. It is likely that such a development would be visible over considerable distances, raising concerns about cumulative impacts. All other things being equal, it would be logical to steer wind farm development to those parts of the plateau moorlands already affected by mineral working, forestry or other developments.

## **Management and Planning Guidelines**

- 5.204. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the open and largely undeveloped character of these moorland hills and to reduce adverse effects associated with past patterns of forestry.**

### **Agriculture**

- discourage improvement of pastures and rough grazing;
- encourage the conservation of dry stone dykes in local stone with an emphasis on roadside walls and others in highly visible areas;
- hill farming should be maintained as an essential feature of the landscape with the continuation of moorland grazing particularly within broad enclosures;
- maintain present 'untamed' nature of landscape;
- support heather management (muirburn) schemes where appropriate;
- use the agricultural development notification scheme to influence the design, colour, materials, screening and location of any new farm buildings. Explore the use of planning conditions attached to new buildings to provide screening where appropriate.

### **Forestry and Woodland**

- cultural features, particularly mining relics, should not be obscured by forestry;
- implement a phased programme of felling, redesign and replanting of existing plantations to reduce the adverse impact on the environment;
- forest design should seek to introduce diversity into currently afforested areas in the form of open space patterns, age and species mixes and coupes patterns;
- forest restructuring should also seek to 'expose' and preserve cultural features such as walls and archaeological ruins;
- general presumption against large scale extension of existing forest blocks;
- maintain present 'untamed' nature of unforested parts of this landscape;
- new forestry proposals should, if possible, be targeted to areas of more bland topography of lesser scenic and geomorphological interest;

- new planting should conform to the Forestry Authority's design guidelines. In particular, it should respond to the large scale nature of the landscape, the importance of views within and out of the hills, and historic and ecological values;
- consider opportunities for new woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the relative importance of different areas of existing woodland (e.g. commercial plantation versus semi-natural woodland) and how this would be influenced by an increase in woodland cover;
  - the importance of key views and features within the landscape;
  - opportunities to provide screening and shelter;
  - opportunities to link isolated areas of woodland;
- take proactive steps to extend woodlands around future open cast and quarry sites.

#### ***Recreation***

- focus recreation activities and the provision of new facilities at existing centres;
- general presumption against large scale built developments;
- maintain low-key level of provision;
- monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary;
- support small scale, low-key tourism or recreational development.

#### ***Development***

- discourage development in the upland landscape;
- general presumption against large scale built developments;
- where development is permitted, ensure that buildings are located in order to minimise their impact on the landscape (utilising any natural screening provided by the landform) and that they adopt vernacular styles, building materials and colours.

#### ***Minerals***

- ensure adequate on and off-site screening during the operation of any sites that are granted consent;
- ensure that proposals for mineral working are subject to thorough environmental assessment and that they are accompanied by full restoration proposals;
- monitor future demand for mineral working. Ensure that any schemes that come forward are restoration-led and are located so as to minimise landscape impacts during operation;
- support selective reclamation of derelict mining sites but retention of key features;
- take proactive steps to extend woodlands around future quarry sites where this does not conflict with landscape character.

### **Tall Structures**

- assess any proposals for aerials or masts in terms of their visual impact on the landscape;
- encourage any wind power developments to locate away from key skylines;
- encourage telecommunications companies to share facilities where it is evident that this would reduce the overall landscape impact;
- encourage the development of a regional strategy for renewable energy, including wind power, in order that the most appropriate types of development and areas come forward;
- planning policies should indicate that medium scale wind power development may be suitable in areas where landform, landcover or land use can minimise intrusion;
- wind energy developments should be discouraged in the more untamed parts of this landscape, and encouraged to locate in those areas already affected by development or large scale land use changes;
- potential siting of wind towers should attempt to use adjacent forested landscapes to aid screening and backclothing;
- the cumulative and sequential effects of wind farm developments in the Plateau Moorlands should be taken into account;
- small scale wind developments, designed specifically to supply local needs, may be appropriate in more remote parts of the moorlands;
- underground cable solutions should be considered in preference to pylon lines.

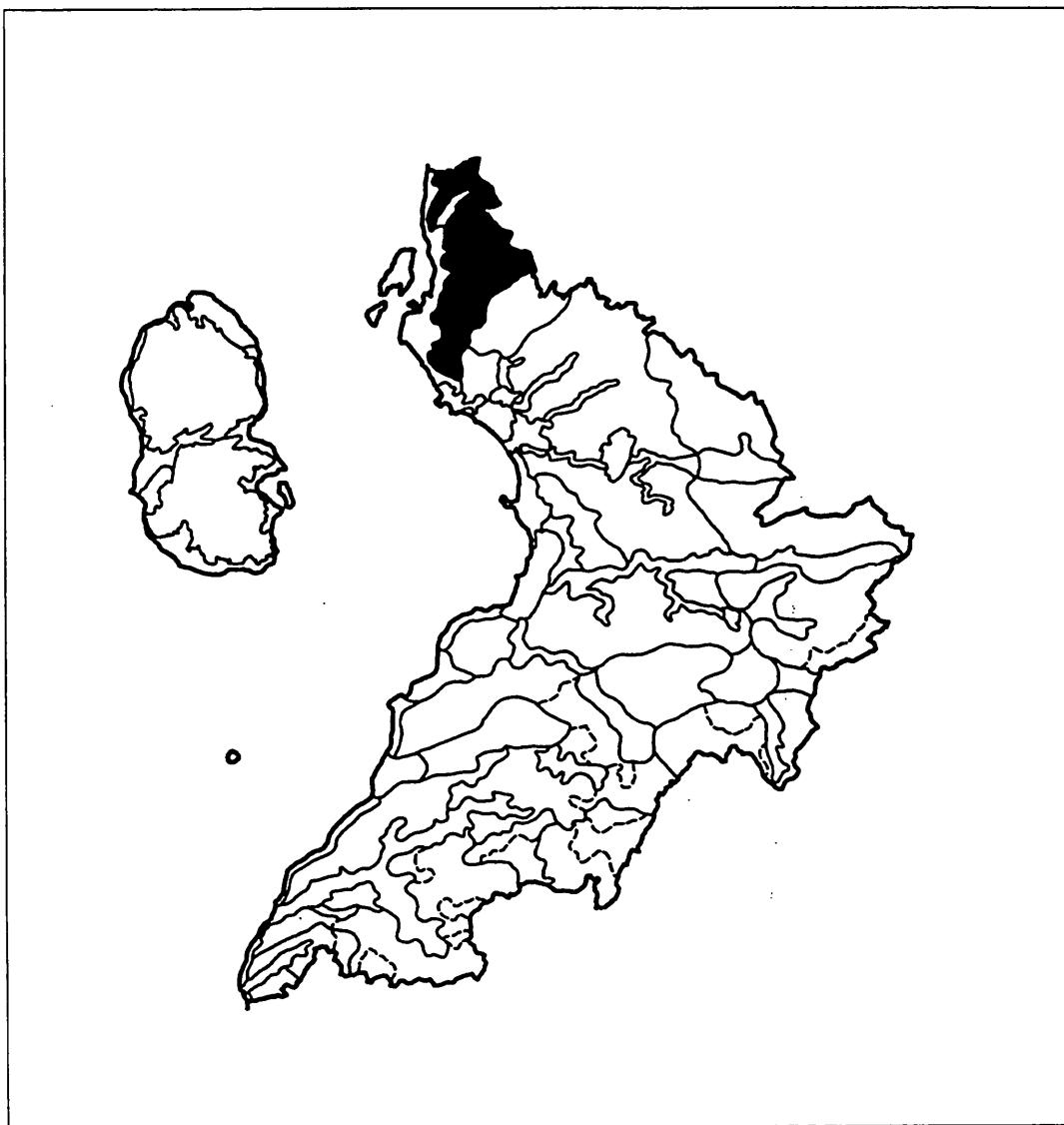
### **Transport**

- develop a road use hierarchy as a basis for management;
- minimise severance features such as cuttings and embankments in this open landscape; allow sufficient landtake to integrate new roadworks with surrounding landforms;
- ensure that further proposals for improvements such as dualling or the provision of grade separated junctions are assessed in terms of their wider landscape impact. Where major, unmitigatable impacts exist, explore alternative solutions including traffic management and traffic calming;
- where road improvement schemes take place, ensure that boundary walls and hedgerows, together with other features such as stone bridge parapets and milestones are re-instated.

## **S: RUGGED MOORLAND HILLS AND VALLEYS**

- 5.205. Two areas of Rugged Moorland Hills are found in Ayrshire. The first is the North Ayrshire Hills which lie between the coast above Ardrossan and the Garnock Valley. The second area comprises the South Arran Hills and represents a sub-type: Rugged Moorland Hills and Valleys with Forestry (S(b)). The two landscape areas are described in turn below. Forces for Change and Management and Planning Guidelines are presented for the landscape type as a whole.

### **North Ayrshire Hills**



- 5.206. Between the section of raised beach north of Ardrossan and the Garnock Valley lies a series of rounded hills and moors rising to form a dissected plateau 300-500 metres AOD. The hills are formed of carboniferous basalts with intrusive agglomerates and dolerite sills.

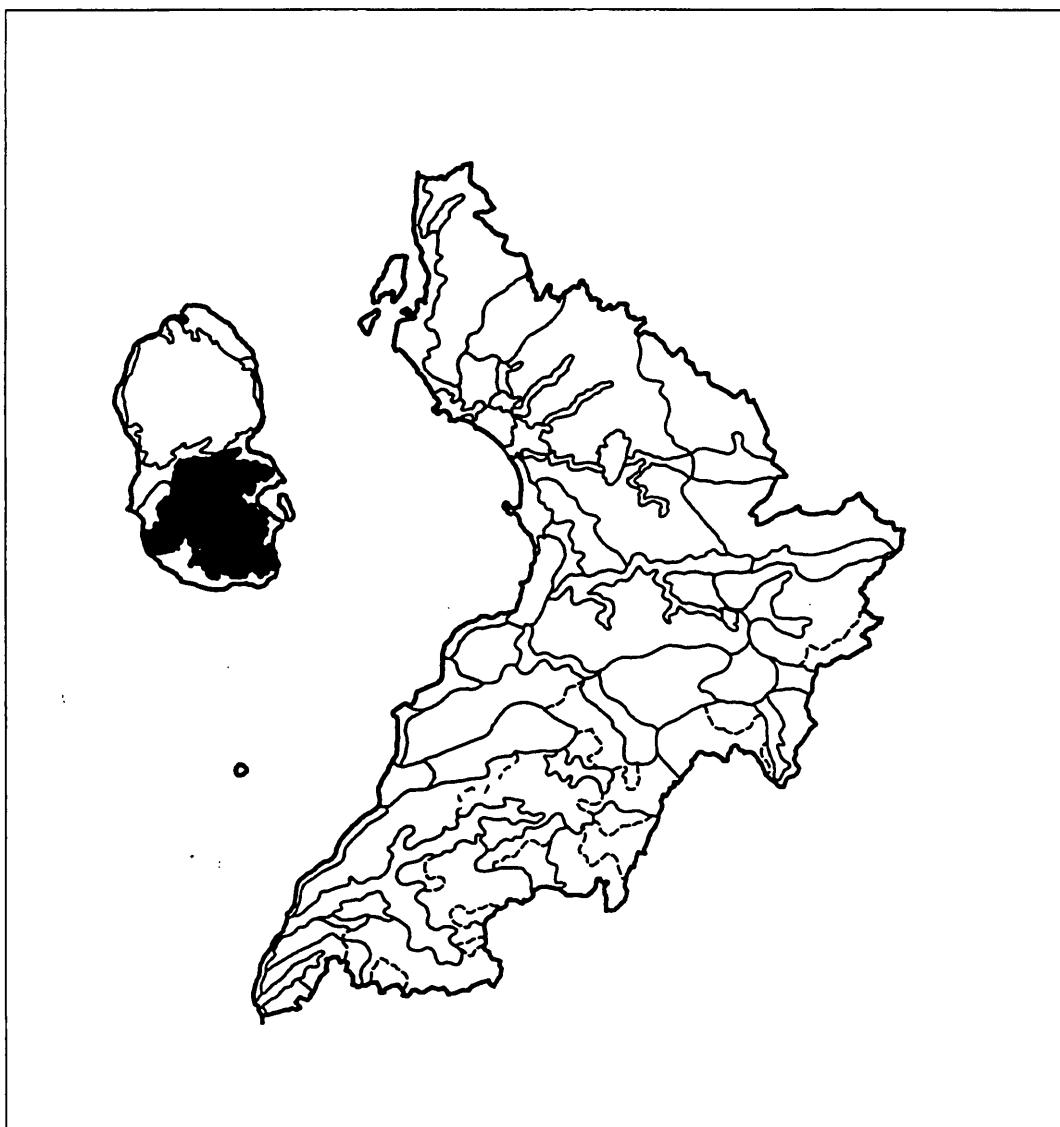
The hills form a broad triangle, with the scale of the landform declining to the southern point. South of Largs a series of harder intrusions stand as isolated; or semi-isolated, bluffy hills. Examples include Law Hill, and the Knockewart Hills. While south eastern hill slopes tend to be comparatively gentle, blending into the Garnock Valley, to the west they are steep, forming a craggy escarpment (the dramatic, former coastal cliffs described in relation to the Raised Beach landscape type) above the coastal strip. The hills are cut by two principal valleys - Camphill valley between Kilbirnie and Largs and Brisbane Glen to the north east of Largs.

- 5.207. Landcover is dominated by moorland vegetation, grading from heather and grass moorland, through rough grazing and abandoned pastures to improved pastures on the lower slopes. Agriculture is dominated by sheep grazing with enclosures on lower slopes and rough unenclosed grazing on upper slopes. Field boundaries are marked by drystone dykes, wire and post fences and some hedges on lower slopes. There is evidence of abandoned enclosures on some of the upper slopes. Lines of mature or semi-mature beech trees indicate lines of outgrown, sometimes abandoned field boundaries. There is very little natural woodland. In addition to the remnant lines of beech there is a small number of coniferous woodlands, especially on more sheltered eastern slopes
- 5.208. Historically, most settlements would have avoided these exposed uplands in favour of the more sheltered and fertile lowlands. A few Iron Age hut circles and hill forts occur within the hills and a line of castles mark the boundary with Garnock Valley. Modern development is scarce, comprising little more than a scatter of farmsteads. Hilltop masts are prominent in the landscape. Even more prominent is the double line of electricity pylons which lead from Hunterston Power Station across the southern part of this landscape type and into the Garnock Valley. Several of the valleys have been dammed, creating reservoirs to serve surrounding urban areas. Muirhead and Camphill Reservoirs alongside the A760 are perhaps the best known. Others include Knockdown, Caaf and Munnoch Reservoirs. The dams and other water supply infrastructure comprise an important element of the landscape of these upland valleys.

## S(b): Rugged Moorland Hills and Valleys with Forest

### South Arran Hills

- 5.209. In contrast to the spectacular granite mountains that comprise much of northern Arran, the southern part of the island comprises an area of rugged moorland, underlain by red sandstone with numerous, more resistant Tertiary dykes, sills and intrusions which give the moorlands a degree of ruggedness. In contrast to the orientation of the North Ayrshire Hills, the bedding planes dip gently towards the south-west, creating comparatively shallow slopes in the south-west and steep, almost craggy escarpments in the east, towering above Brodick and Lamlash.
- 5.210. A series of valleys cut into the upland mass, providing routes for 'the String' and 'the Ross', two high passes across the southern part of the island. The valleys show a transition from upland with stands of semi-natural oak and birch where shelter allows, and networks of drystone dykes constructed from rounded boulders, to more settled, pastoral lowlands with regular, hedged fields and a predominance of beech, chestnut and field maple.



- 5.211. Much of the higher moorlands have been afforested, creating very extensive areas of coniferous plantation, most of which extend down to the road which encircles the island. Like the granite uplands to the north, settlement within these rugged moorland hills is scarce, limited to the occasional isolated farmstead, sited high in one of the valleys.

### **Forces for change**

- 5.212. In this section we describe the principal types of change that have affected the Rugged Moorland Hills and Valleys landscape type as a whole in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.

- 5.213. **Agriculture:** farming is, at best, a marginal activity in these uplands. Although abandoned field boundaries are visible along the transition from more lowland areas, modern farming is largely confined to sheep grazing on the moorlands. A small number of farmsteads are sited high in the valleys that cut into the hills. Pressures appear to be few, though changes in subsidy levels could result in significant change. Drystone dykes are an important feature of this landscape type, particularly around the fringes and in the moorland valleys. These should be conserved.
- 5.214. **Woodland:** within the North Ayrshire Hills, extensive woodland is rare, though a few small to medium sized coniferous plantations are found in the main valleys. This area was identified as a 'sensitive area' in the Strathclyde Indicative Forestry Strategy. Much more extensive coniferous plantations cover much of southern Arran. This tends to be concentrated in the southern and western parts of the South Arran Hills, extending down to the coastal strip at Brodick and on the southern part of the island. Other, smaller areas of plantation woodland are found in the western part of the hills, while a relatively new area of planting is sited in the high, central part of the uplands. The current balance of open moorland to forestry favours the latter, particularly along roads crossing the area, suggesting that there is limited potential for additional woodland. There is, however, scope for the improvement of existing plantations as they approach the next rotation of harvesting and replanting.
- 5.215. Semi-natural woodland, comprising birch and oak, is found in many of the steep sided valleys which drain the moorlands.
- 5.216. **Development:** there are few development pressures on this landscape type. Within the North Ayrshire Hills there has been a history of reservoir development, and, although the waterbodies and dams sit relatively easily in the valley landscapes, other elements of the water infrastructure (for example south of Camphill Reservoir) are of a less sensitive design. A further intrusive element in the landscape of the North Ayrshire Hills is the line of electricity pylons which cross from Hunterston to the Garnock valley, crossing the skyline in a number of places.
- 5.217. **Recreation:** recreation pressures in these hills are few. Most activity on Arran is focused in settlements such as Brodick or within the more dramatic northern hills, though forest walks and trails have been established to the south of Brodick. Within the North Ayrshire Hills, recreation activity is very limited, largely confined to the provision of a viewpoint and picnic area on the hills overlooking Largs and the Firth of Clyde. The area further north comprises the Clyde Murshiel Regional Park and is more heavily used.
- 5.218. **Wind power:** it is likely that both these areas of rugged moorland hills have potential for wind power development, though it may be constrained by the nature of existing power infrastructure on Arran. While there may be opportunities to develop wind farms in these hills, there could be significant local effects, as well as broader implications for sensitive landscapes nearby, particularly where important skylines were affected. On the other hand, small scale wind turbines could provide a means of sustaining farming communities in some of the more remote parts of the hills.

## **Management and Planning Guidelines**

5.219. The following guidelines apply to both occurrences of the Rugged Moorland Hills and Valleys and reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve the untamed nature of the moorland landscape and to emphasise contrasts with surrounding lowlands.**

### ***Agriculture***

- enhance wildlife value through careful grazing management;
- maintain present ‘untamed’ nature of landscape;
- stone wall field boundaries should be protected and maintained;
- support heather management (muirburn) schemes.

### ***Forestry and Woodland***

- explore opportunities to modify management practices to allow the regeneration of native woodlands on some valley slopes, to create the ‘natural’ transition from valley woodland, through dwarf woodland to the vegetation of the moorland summits and plateaux;
- retain and manage surviving pockets of native woodland;
- further planting should be restricted to areas already dominated by forest;
- a predominance of open ground should be preserved with generally large scale patterns of forest and open ground;
- forest design should seek to reflect the topographic diversity in open space patterns, species mixes and coupes patterns;
- forest restructuring should seek to ‘expose’ and preserve cultural features such as walls and archaeological ruins and geological or geomorphological features;
- forestry restructuring for spatial, age, species and wildlife diversity should be progressed;
- maintain present ‘untamed’ nature of landscape in areas currently devoid of forestry;
- new planting should conform to the Forestry Authority’s design guidelines. In particular, it should respond to the medium to large scale nature of the landscape, the importance of views within and out of the hills, and historic and ecological values;
- new woodland planting should respect the shape and scale of topography, with opportunities to enhance topographic variations through careful woodland design;

- consider opportunities for new woodland planting in terms of:
  - the overall balance of woodland and open space;
  - the relative importance of different areas of existing woodland and how this would be influenced by an increase in woodland cover;
  - the importance of key views and features within the landscape;
  - opportunities for provide screening;
  - opportunities to link isolated areas of woodland;

***Recreation***

- general presumption against built developments;
- maintain low-key level of provision;
- Monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary;
- support small scale, low-key tourism or recreational development.

***Development***

- discourage development in the upland landscape;

***Tall Structures***

- planning policies should indicate that medium scale wind power development may be suitable in areas where landform can minimise intrusion and cultural history provides an appropriate context;
- potential siting of wind towers should attempt to use adjacent forested landscapes to aid screening and backclothing;
- underground cable solutions should be considered in preference to pylon lines.

***Transport***

- develop a road use hierarchy as a basis for management;
- minimise upgrading or improvement of roads particularly where this involves the creation of cuttings and embankments, or the introduction of additional signage, road paint or features such as concrete kerbing.

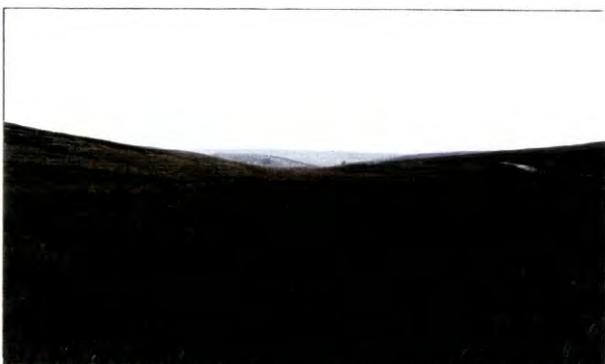
## LANDSCAPE CHARACTER TYPES



FOOTHILLS: view east over the foothills from Brown Carrick Hill



SOUTHERN UPLANDS: south of New Cumnock



PLATEAU MOORLAND: North of the Ayr Valley above Muirkirk



RUGGED GRANITIC UPLAND: Goat Fell, on Arran



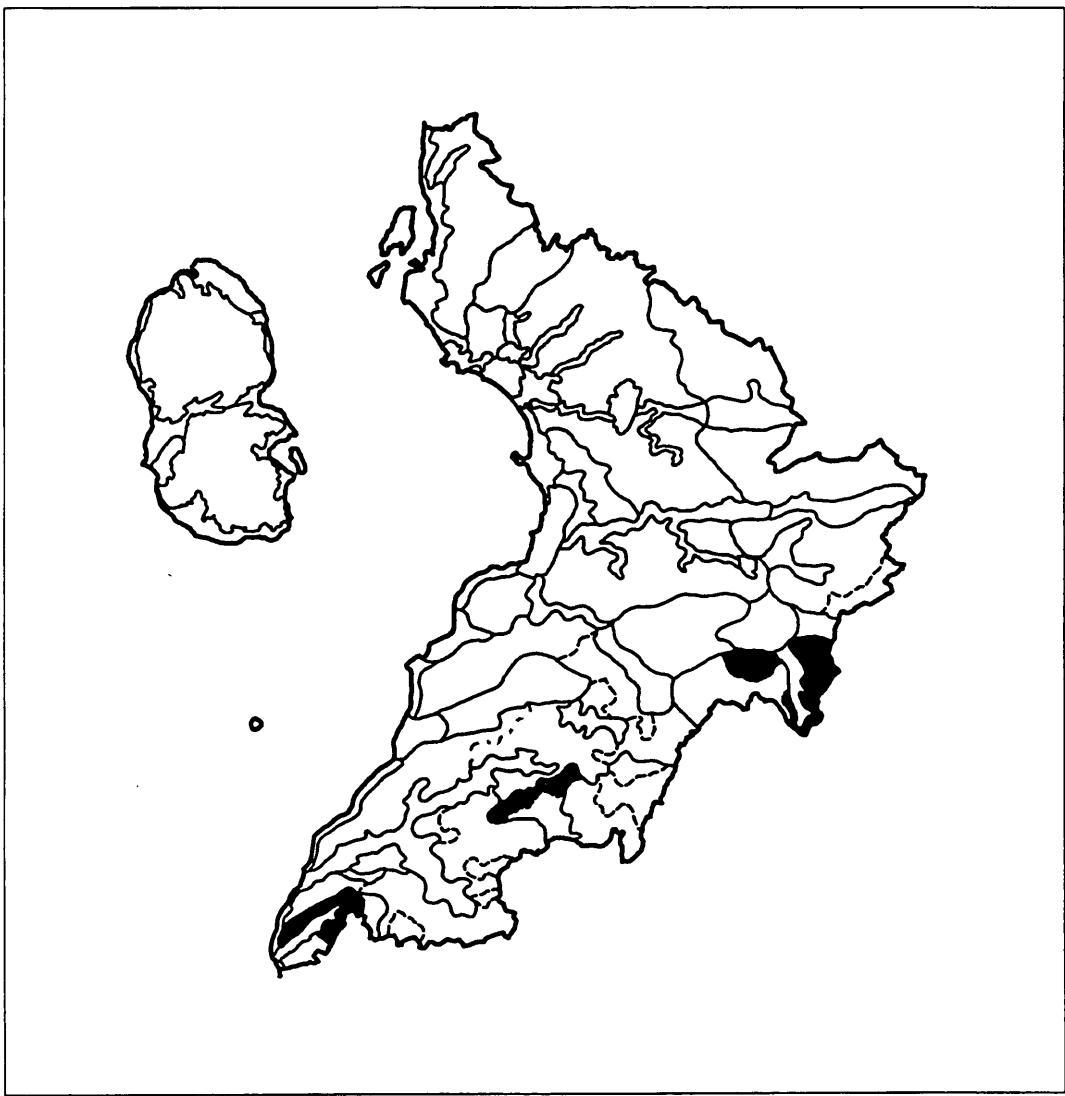
RUGGED MOORLAND AND VALLEYS:  
Camphill Reservoir in the North Ayrshire Hills



ROCKY VOLCANIC ISLAND: Holy Island off Arran. Ailsa Craig in far distance.



## T: SOUTHERN UPLANDS

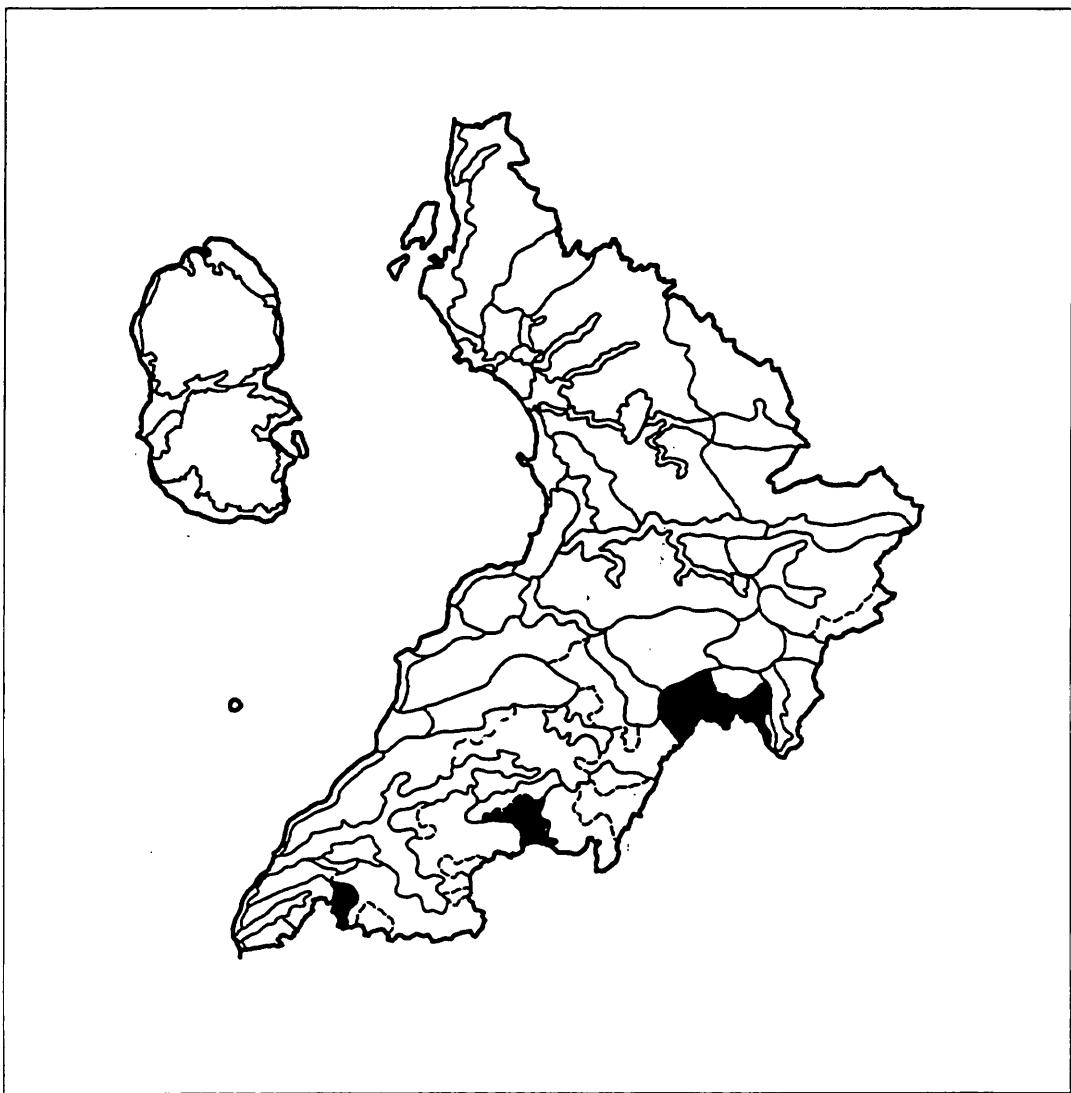


5.220. Immediately south of the Southern Upland Fault lie a number of bold upland areas which have a character very different to the lower moorlands and hills to the north and west. This character is derived from the hills' height (up to 575 metres AOD), their geology (Ordovician rocks, predominantly more resistant greywackes) and the influence of glacial erosion. Southern Uplands with Forest (T(b), see para. 5.225.) comprises a subset of this landscape type.

5.221. The hills are characterised by steep, smooth slopes rising to rounded summits. Cut into the uplands are a series of distinctive glacial valleys, with U-shaped cross sections, precipitous side slopes, hanging valleys, waterfalls, crags and scree. The combination of these features, and the contrast with lower moorlands and the lowlands to the north, gives an impression of uplands which are more extensive, remote and higher than is actually the case. Most parts of the uplands are accessible on foot only, though a minor road climbs up to the Nick of Balloch (on fine days providing spectacular views) and another runs along the valley of the Afton Water, south of New Cumnock.

- 5.222. Landcover in the Southern Uplands is typically coarse grassland, though the highest areas often comprise heather moorland. Areas of rough grazing generally lack walled enclosures. Semi-natural woodland is scarce, limited to a few more sheltered glens, gullies and clefts. There are also extensive areas of coniferous plantations, particularly around the fringes of the higher hills.
- 5.223. Modern settlement is absent from these exposed uplands, being concentrated in river valleys and the larger glens. It is likely that settlement was more extensive during milder periods in the past. There has been little investigation to confirm this, however.

#### T(b): Southern Uplands with Forest



- 5.224. In topographic respects, the Southern Uplands with Forest landscape type is the same as the Southern Uplands type (T). Its character is, however, considerably different due to the dominant forestry landcover. Indeed, the visual influence of these forests extends over considerably larger areas than those plotted on the above plan. The forestry is predominantly Sitka spruce, the main variations being in mixes with larch which provides colour contrasts between the dark green of spruce and the light greens to browns of

larch. The forests generally extend over the summits or are concentrated on the side slopes leaving the domed peaks exposed. The rotational nature of forest management provides long term textural and colour changes related to the felling and replanting coupes.

## Forces for change

- 5.225. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.226. **Woodland:** the establishment of extensive coniferous plantations has had a very significant effect on the nature of this landscape type. Approximately half the Southern Uplands area is now under conifers. Future rotations and the implementation of the Forestry Commission's forestry design guidelines should result in an improvement in the visual quality of these forests. There is, however, a need to review the overall balance of open land to woodland, particularly in the light of the description of parts of the area as 'potential areas' in the Strathclyde Indicative Forestry Strategy.
- 5.227. **Wind power:** it is likely that large parts of the southern uplands have potential for wind power development, though this is likely to be constrained to some extent by the availability of connections into the power distribution system. All other things being equal, it would be logical to steer wind farm development to those parts of the southern uplands already affected by forestry or other developments. More sensitive sites should be avoided.

## Management and Planning Guidelines

- 5.228. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve and, where appropriate, restore the character of the southern uplands landscape, promoting more natural patterns of landcover and reducing the visual impact of extensive areas of forestry.**

### *Agriculture*

- maintain present 'untamed' nature of landscape;
- stone wall field boundaries should be protected and maintained;
- support continuation of moorland grazing particularly within broad enclosures;
- support heather management (muirburn) schemes.

## **Forestry and Woodland**

- explore opportunities to modify management practices to allow the regeneration of native woodlands on some valley slopes, to create the 'natural' transition from valley woodland, through dwarf alpine woodland to the vegetation of the upland summits and plateaux;
- retain and manage surviving pockets of native woodland;
- implement a phased programme of felling, redesign and replanting of existing plantations to reduce the adverse impact on the environment;
- forestry restructuring for spatial, age, species and wildlife diversity should be progressed;
- forest restructuring should seek to 'expose' and preserve cultural features such as walls and archaeological ruins;
- in the unforested areas a predominance of open ground should be preserved with generally large scale patterns of forest and open ground;
- forest design should seek to reflect the topographic diversity in open space patterns, species mixes and coupes patterns; dramatic landform features should remain exposed;
- further commercial forestry should be targeted to areas already dominated by forest;
- general presumption against large scale forestry on lower slopes;
- link new woodlands to lower altitude woodlands, shelterbelts, glen woods and farm woodlands, providing a transition from broadleaves to conifers;
- maintain present 'untamed' nature of more elevated parts of the landscape;
- new forestry proposals should, if possible, be targeted to areas of blander topography of lesser scenic and geomorphologic interest; dramatic glaciated landscapes should be avoided i.e. 'U'-shaped valleys, screens etc;
- new planting should conform to the Forestry Authority's design guidelines. In particular, it should respond to the large scale of the landscape and the importance of views from high vantage points within the hills;
- with respect to the replanting of existing plantations on valley slopes:
  - encourage the rationalisation of woodland to avoid isolated, small to medium sized areas of plantation woodland which appear very prominent in an otherwise open landscape;
  - adopt a more naturalistic appearance, responding to the landform and features such as burns, gullies and crags;
  - create graded and irregular margins at the top and bottom of the slope, allowing views of upper slopes from within the valley;
  - discourage straight lateral edges - do not plant up to the edge of a land holding where this creates a strong and geometric vertical line;
  - employ more varied species mixes;
  - vary the size of felling coupes, with smaller areas on lower slopes;

### ***Recreation***

- maintain low-key level of provision;
- monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary;
- support small scale, low-key tourism or recreational development.

### ***Development***

- discourage development in the upland landscape.

### ***Tall Structures***

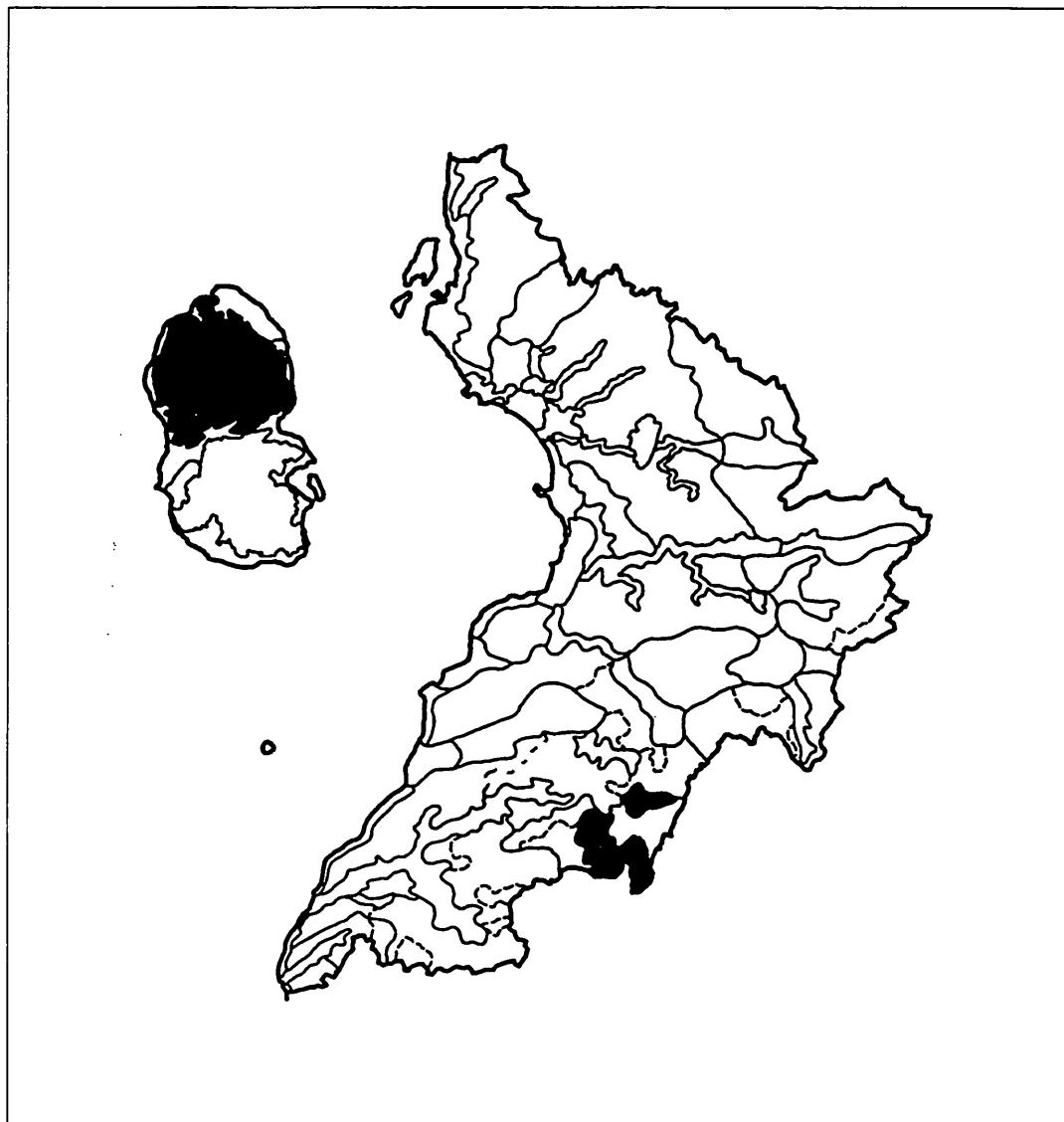
- planning policies should indicate that medium scale wind power development may be suitable in areas where landform can minimise intrusion and cultural history provides an appropriate context;
- encourage any wind power developments to locate away from key skylines and valleys;
- potential siting of wind towers should attempt to use adjacent forested landscapes to aid screening and backclothing;
- Encourage telecommunication companies to develop a strategy for mast provision which reflects the sensitivity of the local landscape.

### ***Transport***

- develop a road use hierarchy as a basis for management;
- minimise upgrading or improvement of roads;
- where road improvement schemes take place, ensure that hedges and drystone walls and hedgerows together with other features such as milestones, finger posts and gates are re-instated.



## **U: RUGGED GRANITIC UPLAND**



- 5.229. Rugged Granitic Uplands occur in two parts of Ayrshire. The first is the southern part of the area, where the Merrick Range of mountains crosses into Ayrshire near Loch Doon, from Dumfries and Galloway. The second is the northern part of Arran, where a vast granite intrusion has created one of the most dramatic mountain landscapes in the country. Much of this area is designated as a National Scenic Area. Rugged Granitic Uplands with Forest (U(b)) comprise a subset of this landscape type, occurring in the Loch Doon Mountains.

### **Loch Doon Mountains**

- 5.230. Towering above even the nearby areas of Southern Uplands landscape type, the Rugged Granitic Uplands comprise the most 'highland' of landscapes on the Ayrshire mainland. Comprising part of the Merrick mountain range, extending into Ayrshire from Dumfries and Galloway, these hills have been formed by a massive, hour glass shaped granite intrusion through the surrounding sedimentary greywackes and agglomerates. The heart of the intrusion comprises the distinctive white granite that is evident in the outcrops on Mullwharchar and Macaterick. This resistant core is surrounded by the softer tonalite

granite which has been eroded to form a lower corridor occupied by a series of lochs. This, in turn, is enclosed within a ring of hills (including Shalloch on Minnoch, Craiglee and Wee Hill of Craigmulloch) formed of metamorphosed sedimentary rocks. The hills have been modified by the glacial erosion which carved out the less resistant granite and formed the corries and glens that characterise the western face of the Merrick range.

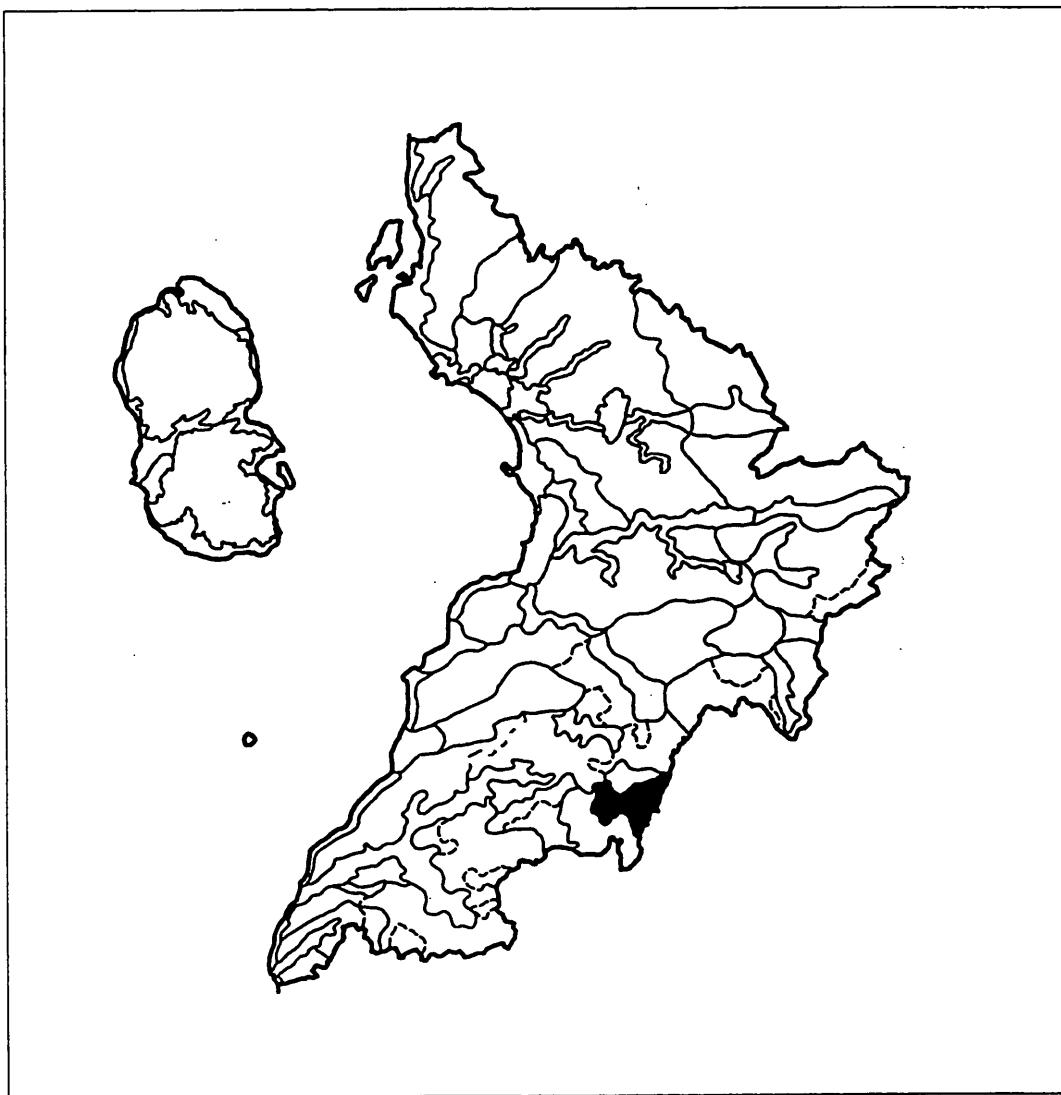
- 5.231. The land cover of these uplands is dominated by heather moorland and rough grassland, scattered with many small lochan and areas of exposed rock outcrops. There is little or no native woodland, though evidence from peat bogs suggests that many of the lower hillslopes would have been clothed in oak, birch or pine woodland in early post-glacial times. Climatic changes, allied to grazing pressures have resulted in the loss of this woodland over subsequent millennia. Today, it is commercial conifer plantations which cover many of the lower slopes (eg south of Loch Doon), though the higher summits and ridges are free of woodland.
- 5.232. This comprises one of the most remote and unsettled parts of Ayrshire. Roads run around the fringes of the area, for example along the western shores of Loch Doon, but do not penetrate the core of the uplands. From the summits which rise above the surrounding forests, there are dramatic and extensive views in all directions. It is an area that is highly sensitive to forms of development which would intrude upon this distinctive character.

## North Arran Mountains

- 5.233. The mountains of north Arran represent the remains of a major granite intrusion. The force of the rock movement was such as to deform the Highland Boundary fault, which runs around the edge of the granite, and to influence deposits of other rocks all around. The hills can be sub-divided into two groups. The first comprises the dramatic eastern peaks, including Goat Fell, Caisteal Abhail and Beinn Tarsuinn which are linked by a heavily serrated and knife edge ridge. The second comprises the more rounded western summits of Beinn Bharraein, Mullach Buide, Beinn Bhreac and Beinn Tarsuinn. The entire mountain range has been significantly modified by glacial erosion, both as a consequence of inundation by the main Highland ice sheets and the accumulation of local ice deposits. The result is a highly dissected landform, with the high peaks separated by plunging U-shaped valleys such as Glen Iorsa, Glen Sannox and Glen Rosa. The depth of these valleys, and the proximity of the hills to the coast creates a drama which, in Scotland at least, can only be experienced on other islands such as Skye and Mull.
- 5.234. Landcover is dominated by sparse moorland vegetation and extensive areas of bare rock. Woodland is absent with the exception of the coniferous plantations on the lower slopes along the coastal fringes (eg above Corrie) and an extensive area of plantation above North Glen Sannox. Signs of human settlement are scarce, largely confined to tracks and walkers' footpaths. A complex of small bings and shafts in the lower part of Glen Sannox points to the historic importance of mineral working in the northern part of the area.

- 5.235. These are among the most spectacular mountains in Scotland, providing a remarkable skyline when viewed from the mainland, from Kintyre, or from vessels travelling through the Firth of Clyde. They are widely appreciated and visited, partly reflecting their proximity to centres of population on the mainland.

### **U(b): Rugged Granite Uplands with Forest**



- 5.236. Rugged Granite Uplands with Forest are identified as a subset of this landscape type where large scale afforestation has taken place. It occurs in the Loch Doon Mountains in southern Ayrshire. An essential characteristic of this landscape is the view of granite outcrops and of unforested peaks which are made distinctive by the contrasting colours of grey granite against dark heather and ochre grassland. The scale of the landscape is grand and the character of a highland forest is portrayed by the presence of rock outcrops, cliffs and boulders. As with the other plantation forests, Sitka dominates, with some larch. New forest design principles are evident in clearfell areas, with more irregular shaped coupes related to landform and often opening up vistas into the wider landscape. Large parts of this landscape are within Forest Parks. Design and facilities for visitors are significant features.

## **Forces for change**

- 5.237. In this section we describe the principal types of change that have affected this landscape type in the recent past or which are likely to affect it in the future. Changes may be positive or negative in terms of their effect on the landscape. The aim of this section is to gain a clear understanding of the nature and direction of change and its likely impact on the essential character and quality of the landscape. This analysis provides the basis for management guidelines to assist other organisations develop more detailed policies for agriculture, forestry and development.
- 5.238. **Woodland:** although most summits and hilltops of this landscape type remain unwooded, there are coniferous plantations on some of the lower slopes. This is a particular concern on Arran, where an extensive plantation at the head of North Glen Sannox impinges on views of Goat Fell and surrounding summits. Further afforestation would have an adverse effect on this sensitive and widely appreciated landscape type.
- 5.239. **Recreation:** these uplands are popular for hill walking and climbing, particularly on northern Arran, where Goat Fell is a well visited summit. This raises concerns in terms of erosion, litter and overcrowding. However, this area is owned and managed by the National Trust for Scotland.
- 5.240. **Wind power:** wind power development in this landscape type would be inappropriate given the sensitivity of the landscape.

## **Management and Planning Guidelines**

- 5.241. The following guidelines reflect the sensitivities of the landscape and the pressures for change acting upon it. They are intended to provide a broad basis for the development of more detailed management strategies. **The overall aim of such strategies should be to conserve and emphasise the dramatic and untamed upland landscape character of these granite uplands.**

### ***Agriculture***

- maintain present 'untamed' nature of landscape;
- stone wall field boundaries should be protected and maintained;
- support continuation of moorland grazing particularly within broad enclosures;
- manage grazing to conserve or enhance nature conservation values of upland heaths and grasslands;
- support heather management (muirburn) schemes.

### ***Forestry and Woodland***

- explore opportunities to modify management practices to allow the regeneration of native woodlands on some valley slopes, to create the 'natural' transition from valley woodland, through dwarf alpine woodland to the vegetation of the upland summits and plateaux;
- retain and manage surviving pockets of native woodland;

- implement a phased programme of felling, redesign and replanting of existing plantations to reduce the adverse impact on the environment;
- forestry restructuring for spatial, age, species and wildlife diversity should be progressed;
- forest restructuring should seek to 'expose' and preserve cultural features such as walls and archaeological ruins;
- design of replanted forest should seek to reflect the topographic diversity in open space patterns, species mixes and coupes patterns; important geological and geomorphological features should be exposed;
- further planting should be restricted with a general presumption against large scale forestry;
- seek to create an interface between the planted and unplanted parts of this landscape type through planting native species appropriate in ecological and topographical terms, and by replacement of conifers at rotation.

***Recreation***

- maintain low-key level of provision;
- Monitor erosion and other effects in areas subject to highest pressure, implementing management measures as necessary.

***Development***

- discourage development in the upland landscape.

***Tall Structures***

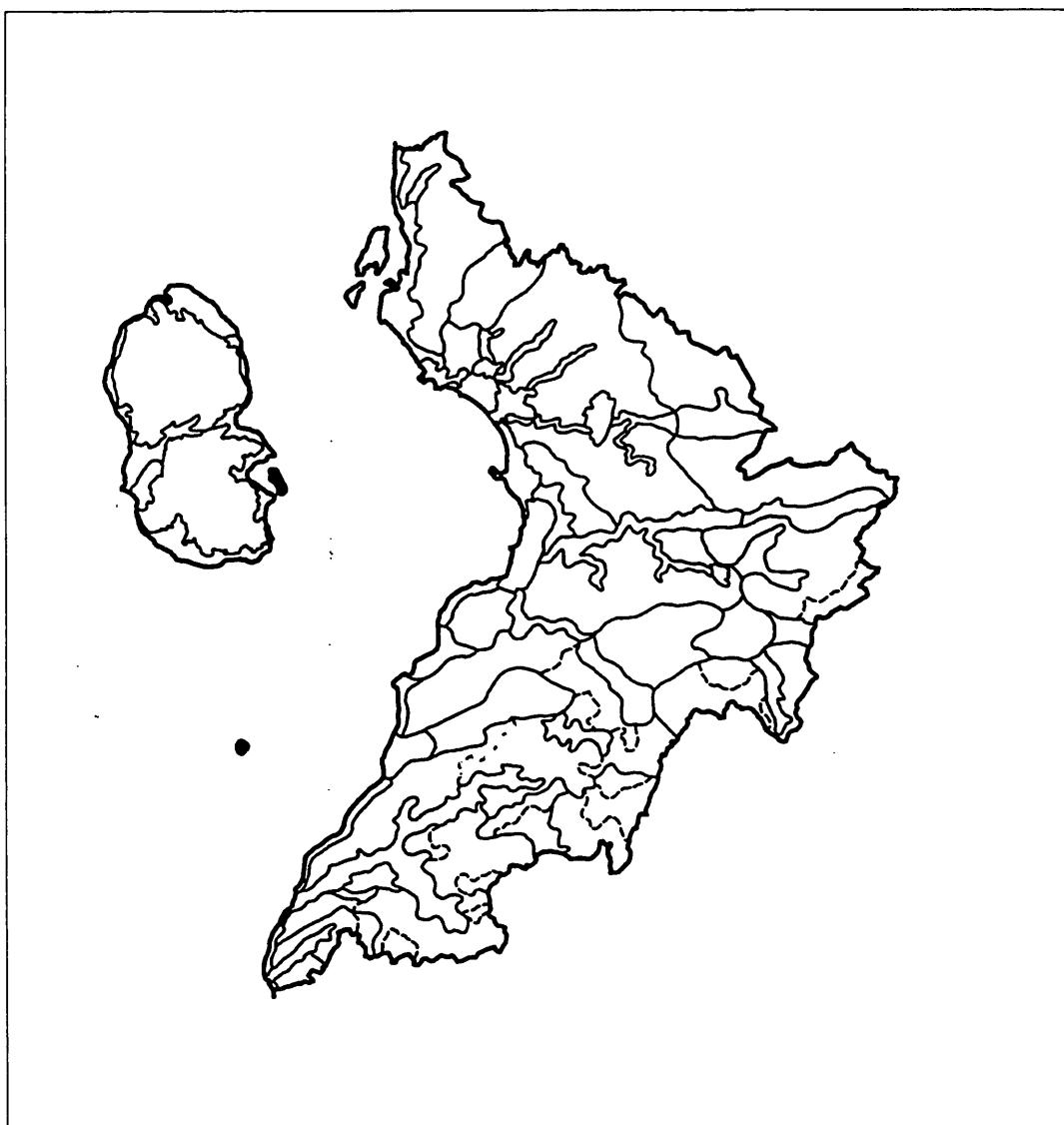
- tall structures should be resisted within this sensitive upland landscape type;
- this area should not be considered as a suitable search area for wind farms on landscape character grounds.

***Transport***

- develop a road use hierarchy as a basis for management;
- minimise upgrading or improvement of roads.



## V: ROCKY VOLCANIC ISLANDS



- 5.242. Two islands, of differing character, fall into this landscape type. The first is Holy Island, a steep, whale-back island, rising from Lamlash Bay on the eastern side of Arran. Although dominated by heathland, small areas of pasture are found at the northern and southern ends of the island, supporting a handful of buildings. A lighthouse is sited on the southern shore of the island.
- 5.243. The second of the two rocky volcanic islands is Ailsa Craig lying south of Arran and west of Girvan. Although appearing as a barran, almost pyramidal rock outcrop on the horizon, when viewed from the mainland or from the southern part of Arran, Ailsa Craig has an apron of lowland on its eastern side which is occupied by a lighthouse and industrial remains associated with curling stone quarries on the north eastern part of the island. There is also a castle and the island is of particular significance to seabirds. Such vegetation as there is comprises rough grassland and scrub.

## **Forces for change**

- 5.244. Although both islands are relatively remote, they are subject to pressures for change which could affect their largely undeveloped character. It is particularly important that the distinctive profiles of the islands are conserved as landmarks of the Firth of Clyde.
- 5.245. Holy Island has, in the past, been planted with woodland which may change the sharp outline of the island as it matures. There have also been proposals to expand a retreat on the island, including the construction of buildings and small scale wind power infrastructure. On Ailsa Craig, there have been suggestions that the quarries may be re-opened.

## **Management and Planning Guidelines**

- 5.246. The following guidelines reflect the sensitivities of the island landscapes and the pressures outlined above. **While there may be opportunities for small scale development, the overall aim should be to maintain the distinctive appearance and profile of the islands, recognising both the importance of the local landscape, and their wider role as landmarks in the Firth of Clyde.**

### ***Agriculture***

- agricultural activity should be limited to rough grazing.

### ***Forestry and Woodland***

- there is a concern that existing woodland on Holy Island may change the island's character as it matures. Management of the woodland, (including control of the island's population of feral goats) should aim to prevent significant changes in the appearance and profile of the island.

### ***Development***

- the sensitive and prominent nature of these islands should be reflected in the scale, location and design of any development that is permitted. While there may be opportunities to allow limited expansion of existing developments, this should be undertaken in a way that is sensitive to the special qualities of the landscape. In particular, elevated or skyline locations should be avoided, in favour of sites close to existing development, thereby limiting the spread of buildings and related infrastructure. Any new buildings should reflect the use of local building materials and styles.

### ***Minerals***

- the quarries on Ailsa Craig provide one of the only sources of rock for curling stones. It may be appropriate to allow some small scale working of the disused quarries on the island where it is clear that this meets a demand for the stone. However, the principal should be to ensure that any further mineral working is limited in extent and does not impinge upon the skyline of the island.

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# **APPENDIX 1: EXPLANATION OF SUBJECTIVE TERMINOLOGY AND SCALE OF ASSESSMENT**

## **Subjective Assessment of Character**

Landscape assessment uses a combination of objective appraisal (which records the presence or absence of particular features such as hedges or buildings) and subjective appraisal during field survey and subsequent analysis. The latter is designed to record the observer's perception of the landscape. The character of the landscape is described under a series of headings, which are explained below and are used to describe each of the landscape types in the rest of the report.

Views	Views are influenced by topographical and landcover factors. They may be <b>distant</b> where there is a large expanse of uniform foreground (e.g. heather moorland) and the focal point (e.g. mountain summit) is at some distance. Views may be <b>framed</b> where there are strong vertical and horizontal elements, such as woodland or steeply rising slopes either side of a bay. Views may be <b>intermittent</b> where the view is interrupted by landform features such as drumlins or woodland cover in the foreground or mid ground. Views are <b>panoramic</b> where expansive, long distance views can be gained for a third or more of the field of view. Views are described as being <b>corridor</b> where they are linear in nature, for example within a valley or along a woodland ride.
Scale	Here the overall scale of the landscape must be assessed once the factors that define it have been identified. These factors include the degree of enclosure by landform or woodland and the main positions from which the landscape is viewed. Scale increases with elevation and distance. The scale may range from <b>intimate</b> (perhaps in the vicinity of a waterfall or burn in a secluded hollow), through <b>small</b> (where a network of small fields might give the landscape a fine grain), <b>medium</b> (where the principal elements are of some size but do not overwhelm the observer) to <b>large</b> where the scale of the landscape is such as to make the observer feel dwarfed. It is not possible to place hard and fast rule on the dimensions which fall into each category.
Enclosure	Where elements are so arranged that they enclose space, this has an effect on the overall composition so that the space and mass become as one. It is also closely related to scale, due to the interaction of the height of enclosing elements and the distance between them. Enclosure may be defined as <b>confined</b> within a very small scale landscape (e.g. within a ravine, or a clearing in dense woodland), <b>enclosed</b> where views are restricted to the immediate context (e.g. within a small to medium sized valley), <b>semi-open</b> where the containment of the landscape is less and views to surrounding areas are more exposed (e.g. within a shallow valley), <b>open</b> where there is little physical containment, but where features such as hedgerows, boundary trees or wall provide some sense of shelter, to <b>exposed</b> where there is no shelter and the observer feels exposed to the surrounding landscape and the weather.

Variety	This reflects the number and diversity of landscape features. On the one hand, a <b>complex</b> landscape will have very many elements (e.g. woods, fields, field boundaries, waterbodies, hills and hillocks, buildings and structures. On the other hand, a <b>simple</b> landscape will contain just one or two elements, such as heather moorland or outcrops of rock.
Texture	This varies according to scale of assessment but may be influenced by the underlying landform, the pattern of landcover and land use including size of fields, nature of boundaries and types of crop. For example, open chalk grassland may be described as <b>smooth</b> , an agricultural landscape of fields, hedges and hedgerow trees may be described as <b>textured</b> , a craggy area of heather moorland might be described as <b>rough</b> while an upland corrie or a section of cliff coast might be described as being <b>very rough</b> .
Colour	This simply records the contribution of colour in the landscape. In winter, a moorland landscape of heather and bog might be described as being <b>monochrome</b> , an area of unimproved pasture might be <b>muted</b> , an area of birch woodland <b>colourful</b> in spring and even <b>garish</b> in autumn. The assessment should take into account changes brought by different seasons and in different weather conditions.
Movement	Movement within the landscape may take a number of forms, reflecting levels of activity and land use, the physical movement of vehicles or people, or natural flows of the tides and falling water. This movement may be <b>remote</b> where it occurs on the fringes of the landscape, <b>vacant</b> where it is slight or absent altogether, <b>peaceful</b> where movement is in harmony with the character of the landscape or <b>active</b> where the movement stands out as an element in its own right.
Unity	The repetition of similar elements, balance and proportion, scale and enclosure all contribute to the sense of unity. The degree to which elements fit within their landscape context also contributes to the degree of unity. A major road through an otherwise unified landscape could result in a high degree of disunity. Degrees of unity include <b>unified</b> where the landscape shows common patterns of elements, management and use, <b>interrupted</b> where the otherwise unified landscape has been modified by moderately discordant elements such as insensitive residential development, <b>fragmented</b> where changes such as new transport infrastructure, or the decline of traditional forms of management mean that only some areas retain the historic character; or <b>chaotic</b> where unrelated landscape elements destroy any pre-existing character but fail to create a unified new landscape.
Naturalness	Naturalness reflects the apparent extent to which human activity has modified the landscape. It is usually used to describe common perceptions of the landscape. In other words, areas of semi-natural or managed landscape such as heather moorland are often described as <b>undisturbed</b> , while enclosed areas of glens may be described as <b>restrained</b> and lowland farmland described as <b>tamed</b> . Areas adversely affected by activities such as mineral working might be described as <b>disturbed</b> .

## **Scale of Assessment**

- 5.247. It should be noted that landscape assessment can be undertaken at many different levels and that landscape types may be defined at very different scales. Whereas, at a regional scale, it may be appropriate to identify the principal upland river valleys, and to draw broad distinctions between their upper and lower sections, based on combinations of typical characteristics, a more detailed assessment might differentiate between river corridor, floodplain, and the lower, middle and upper valley slopes for each section of valley. It is important that assessments undertaken at a regional level are not applied at a locally specific level. The converse also applies.



## **APPENDIX 2: MANAGEMENT MATRIX**

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**Figure 13**

## AYRSHIRE LANDSCAPE ASSESSMENT

### LANDSCAPE CHARACTER AREAS

KEY:

- A = RAISED BEACH COAST
- B = LOWLAND COAST
- C = COASTAL FRINGE WITH AGRICULTURE
- D = COASTAL HEADLANDS
- E = COASTAL VALLEY WITH POLICIES
- F = COASTAL LOWLAND MOOR
- G = AYRSHIRE LOWLANDS
- H = BROAD VALLEY LOWLAND
- I = LOWLAND RIVER VALLEY
- J = UPLAND RIVER VALLEYS
- K = LOWER DALE
- L = MIDDLE DALE
- M = INTIMATE PASTORAL VALLEY
- N = UPLAND GLEN
- O = UPLAND BASIN
- P = LOWLAND HILLS
- Q = FOOTHILLS  
(b) with forestry
- R = PLATEAU MOORLANDS  
(b) with forestry
- S = RUGGED MOORLAND HILLS AND VALLEYS  
(b) with forestry
- T = SOUTHERN UPLANDS  
(b) with forestry
- U = RUGGED GRANITIC UPLAND  
(b) with forestry
- V = ROCKY VOLCANIC ISLAND

- LARGE TOWNS
- SMALLER TOWNS
- ◎ LARGER VILLAGES



1 10  
KILOMETRES



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## **SCOTTISH NATURAL HERITAGE**

**Scottish Natural Heritage is a government body established by Parliament in 1992, responsible to the Secretary of State for Scotland.**

**Our task is to secure the conservation and enhancement of Scotland's unique and precious natural heritage - the wildlife, the habitats, the landscapes and the seascapes - which has evolved through the long partnership between people and nature.**

**We advise on policies and promote projects that aim to improve the natural heritage and support its sustainable use.**

**Our aim is to help people to enjoy Scotland's natural heritage responsibly, understand it more fully and use it wisely so that it can be sustained for future generations.**

