Northern Ireland Landscape Character Assessment 2000

LCA 58 Long Mountain Ridge

Landscape

Last updated: 23 November 2006

Key Characteristics

- Distinct rounded ridge orientated north-south with undulating side slopes and a broad rounded crest.
- Pastoral farmland with strong hedgeline geometry and numerous trees; patches of moss on the exposed ridge top, especially towards the north.
- Wooded estates, with distinctive buildings, designed landscapes and avenues of beech on lower slopes overlooking the River Main valley.
- Settlements and houses frequent and regularly distributed, often on raised areas; more numerous on ridge sides, but rarely a dominant feature.
- Scale varies considerably; large at bottom in flat, open terrain, medium to small on intricate, undulating sides and vast at the top.
- Distant elevated views into lowlands and across to other ridges.

Landscape Description

This landscape character area comprises a long ridge of land, known as the `Long Mountain', that runs from Ballymoney in the north to Randalstown in the south. It has been created by the relative lowering of softer bands of Lower Basalt on either side of it which are now occupied by the Lower Bann and River Main valleys to the west and east respectively. Despite variations in topography and character, the ridge reads as a single feature in the landscape and forms a distinctive skyline. In common with most of Ballymena and Antrim, this area is dominated by pasture, supported by the fertile Antrim lavas which underlie it. Field size and structure varies with landform; on the undulating side slopes fields are smaller and hedges more extensive, their curving lines emphasising the landform; the flatter terrain on the ridge top permits larger fields. Trees are prevalent in hedges and shelterbelts and as small isolated stands, but woodland in the south is uncommon. To the north, on the higher slopes that cross into Ballymoney,

pasture gives way to patches of moorland scrub which intermix with farmland to create a diverse landcover, including Craigs Wood, a large straight-edged conifer plantation. In this area there are craggy outcrops at the heads of stream valleys and a large number of interesting archaeological features on the slopes of Long Mountain above Finvoy.

Settlement is widespread on the sheltered side slopes; it comprises small settlements, such as Rasharkin and Dunloy, and small groups of dwellings. The church spire of Moneyglass is a particular landmark. A complex network of roads with telegraph poles adds to the impression of a well settled landscape, and the tall mast at Tully is a prominent feature. The many small wooded estates on the lower slopes overlooking the River Main valley are associated with stone walls, designed landscapes and avenues of beech trees. There are often attractive outbuildings or small groups of estate cottages. Despite the predominance of farmland, this is a landscape of diverse scales and landforms. On its complex rolling sides, views constantly vary and the ridgeline commands some exceptional views into the valleys; for example, from Battery Hill on the B18 looking east and from Glenvale on the B64 looking north east.

Landscape Condition and Sensitivity to Change

This landscape is intensively used as an agricultural resource, for housing and for roads. Moderate increases in these will not substantially alter its character, although proliferation of housing could threaten landscape character. The moorland is quite fragmented and substantially undermanaged; its conservation is paramount to local landscape character on the upland ridge top. Peat cutting, windfarms, pylons and telecommunication masts are pressures for change in this moorland area. The estate woodlands on the eastern slopes of the ridge are particularly prominent in views from the River Main valley and are relatively sensitive to change. There are signs that some of the woodlands are undermanaged and that prominent stands of trees may be in the early stages of decline.

Principles for Landscape Management

- Avoidance of peat cutting and management of moorland habitats would ensure their visual and nature conservation interest is maintained.
- The structure of the landscape may be strengthened by managing hedgerows, particularly on the prominent side slopes.
- The settings to archaeological features require protection. Specific viewpoints with interpretation boards would add to visitor interest.

Principles for Accommodating New Development

- Houses in promontory locations may provide a focus for views but should be carefully designed; sheltered locations are more appropriate.
- Development should be concentrated in small clusters on the ridge top to establish a community identity and retain its open, undeveloped character.
- Use of tree shelter will help to blend houses with the landscape and enhance the woodland structure of the landscape.

Large windfarms are inappropriate in this landscape, but small groups of turbines may create visual interest on the ridge tops. Occasional telecommunication masts may also be accommodated.

Long Mountain Ridge Geodiversity Profile

Last updated: 23 November 2006

Outline Geomorphology and Landscape Setting

The use of a cultural overlay in defining Landscape Character Areas (LCAs) means that they frequently subdivide natural physiographic units. It is common therefore for significant geomorphological features to run across more than one LCA. It is also possible in turn, to group physiographic units into a smaller number of natural regions. These regions invariably reflect underlying geological, topographic and, often, visual continuities between their component physiographic units, and have generally formed the basis for defining landscape areas such as AONBs. It is essential therefore, that in considering the 'Geodiversity' of an individual LCA, regard should be given to adjacent LCAs and to the larger regions within which they sit. In the original Land Utilisation Survey of Northern Ireland, Symons (1962) identified twelve such natural regions.

This LCA lies within the region described as the Central Lowlands. This region owes its large-scale morphology to the early Tertiary subsidence of the Lough Neagh basin into the magma chamber from which the basalts that underlie much of the landscape originated. This has produced a largely centripetal drainage system from the rim of the basin into Lough Neagh that ultimately drains northwards via the Lower Bann. To the south of the Lough Neagh basin, the lowlands extend southwestwards along a Caledonian structural trend into the Monaghan-Clones depression. In the east of the region the lowlands extend northeastwards along the fault-guided Lagan Valley. There are no strong topographical barriers in the region and boundaries between LCAs tend to be subtle. The low gradients of the rivers, especially on the clay lowlands immediately around Lough Neagh, create inherent drainage problems and frequently it is only the slopes of the many drumlins that provide permanently dry sites. The Lough Neagh Basin was a major ice accumulation centre during the Late Midlandian and much of the lowland areas to the north and south of the Lough are dominated by extensive drumlin swarms.

The Long Mountain landscape character area comprises a long ridge of land, known as the `Long Mountain', that runs from Ballymoney in the north to Randalstown in the south. It has been created by the relative lowering of softer bands of Lower Basalt on either side of it which are now occupied by the Lower Bann and River Main valleys to the west and east respectively. The former extent of the Upper Basalt cover is indicated by outliers of these strata to the southeast of Portglenone and at Millars corner east of

rasharkin. Despite variations in topography and character, the ridge reads as a single feature in the landscape and forms a distinctive skyline of a distinct rounded ridge orientated north-south with undulating side slopes and a broad rounded crest. The lower slopes on the northeastern flank of the LCA overlap with the Glarryford esker complex, where the ridge and mound topography adds interest to this area and to the low-lying, frequently bog-dominated, valley of the River Main. The south of the LCA also extends into the drumlin field that occupies the lower valley sides of the River Bann.

Pre-Quaternary (Solid) Geology

The stratigraphy of this area is made up of the mapped formations in the table, the youngest of which usually overlie the oldest.

Tertiary (Antrim Lava Group) stratigraphic succession (between 50 and 60 million years old)

Stratigraphic Table (youngest rocks at the top of the table)

Upper Basalt Formation
Interbasaltic Formation
Lower Basalt Formation

This LCA extends south from Ballymoney to just north of Randalstown and forms the low rolling ground of mid Antrim and the Antrim Plateau. The geology comprises a mix of Tertiary igneous (lava flows, columnar jointed lava flows, ash-falls and red-weathered horizons or boles) formations in bedded, faulted and unconformable contact. Tertiary Lower Basalt Formation makes up 70% of the LCA with the remainder being the other formations in varying proportions.

The Lower Basalt Formation occurs in an extensive outcrop of the plateau of the LCA. They are extensively quarried for construction materials, especially roadstone.

Quaternary (Drift) Geology

Northern Ireland has experienced repeated glaciations during the Pleistocene period that produced vast amounts of debris to form the glacigenic deposits that cover >90% of the landscape. Their present morphology was shaped principally during the last glacial cycle (the Midlandian), with subsequent modification throughout the post-glacial Holocene period. The Late Midlandian, the last main phases of ice sheet flow, occurred between 23 and 13ka B.P. from dispersion centres in the Lough Neagh Basin, the Omagh Basin and Lower Lough Erne/Donegal. The clearest imprint of these ice flows are flow transverse rogen moraines and flow parallel drumlin swarms which developed across thick covers of

till, mostly below 150m O.D. during a period that referred to as the Drumlin Readvance. At the very end of the Midlandian, Scottish ice moved southwards and overrode parts of the north coast. Evidence for deglaciation of the landscape is found in features formed between the glacial maximum to the onset of the present warm stage from 17 and 13ka B.P. - a period of gradual climatic improvement. Most commonly these are of glaciofluvial and glaciolacustrine origin and include: eskers, outwash mounds and spreads, proglacial lacustrine deposits, kame terraces, kettle holes and meltwater channels (McCarron et al. 2002). During the Holocene, marine, fluvial, aeolian and mass movement processes, combined with human activities and climate and sea-level fluctuations, have modified the appearance of the landscape. The landforms and associated deposits derived from all of these processes are essentially fossil. Once damaged or destroyed they cannot be replaced since the processes or process combinations that created them no longer exist. They therefore represent a finite scientific and economic resource and are a notable determinant of landscape character.

The drift geology map for this LCA shows it to be covered by a thin mantle of till, but with significant drift free areas indicative of its overriding by late Midlandian ice moving northwards out of the Lough Neagh Basin. This flow has left numerous streamlined rock ridges orientated approximately S-N, as well as drumlins on the lower flanks of the ridge. In the northeast of the LCA there are limited deposits (1.1km2) of a deglacial sand and gravel complex. The Glarryford Esker/Outwash is an esker ridge and adjacent outwash spread located along the western side of the River Main at Ballymoney. Landforms record subglacial esker deposition, followed by proglacial outwash deposition, late in the deglacial cycle, within a tunnel valley cut into bedrock. Mounds of stratified sediment are probably the eroded remnants of more extensive gravelly spreads formed over ice or ice-rich sediment during final ice wastage.

Key Elements

Deglacial Complexes

GLARRYFORD ESKER/OUTWASH

The esker/outwash association is an important element in the reconstruction of the processes which pertained during the final stages of the Lough Neagh ice mass.

Long Mountain Ridge Biodiversity Profile

Last updated: 23 November 2006

In the following account of this LCA it should be noted that for consistency, the biodiversity section follows the standard order for all LCAs even though some of the communities discussed later may have more importance for biodiversity than those discussed earlier

Key Characteristics

- Woodlands account for less than 1.5% of the land cover, a very low percentage even in comparison with the Northern Ireland average (c. 5%)
- broadleaved and conifer woodland each comprise about half the woodland total
- native broadleaved woodland scarce and confined largely to small patches of hazel-oak on rocky outcrops
- planted broadleaved/mixed woodland in part of Portglenone Forest and in a few estates
- Grassland covers c.77% of the LCA and almost nine-tenths of this is improved pasture of generally low biodiversity
- extensive blanket bog, especially in the north; much has been cut-over, drained, reclaimed or afforested, but some relatively large intact areas of national and international significance. Threat from continued extraction is high.

Woodlands

Woodlands account for less than 1.5% of the land cover, a very low percentage even in comparison with the Northern Ireland average (c. 5%); broadleaved and mixed woodland accounts for about half of the woodland area. The largest area of woodland is Craigs Wood, a State Forest in which Sitka spruce dominates but with significant areas of lodgepole pine and Japanese larch. The biodiversity is generally low, much lower than the blanket peatland that it has replaced. Two parts of Portglenone Forest are included within the LCA; both are on former estate land that was planted by the1830s (parts of the woods therefore are at least long-established) and consist of both broadleaves - particularly beech with sycamore and oak, and alder and willow in damp pockets - and conifers, including Norway spruce, Scots pine and larch.

Small broadleaved woodlands associated with rocky outcrops occur in the north of the LCA. On the west slopes of Lough Rock, oak/hazel scrub, in which most trees are multi-stemmed, has a varied herb flora that includes wood sorrel, sanicle, wood anemone, bluebell and common dog violet. The rare intermediate wintergreen is also recorded. Similar oak/hazel scrub occurs on the west side of Rabbit Rock.

Moneyglass House has a large parkland (**lowland woodland pasture and parkland**) with extensive planting of broadleaves that pre-dates 1833. The avenue is of chestnut and there is a row of walnut, but much of the planting is of beech, oak, larch and Scots pine. However, there is abundant ash and some woodland with hazel, birch and willow that suggests a more semi-natural origin. Planting at Glebe House, of around 1830, is mixed broadleaves and conifers - including beech, larch, Scots pine, ash, oak, sycamore - and there is also an arboretum.

At Tamnaghmore, a central mature woodland with much ash is surrounded by modern planting; some of this is of conifers but there is extensive broadleaved/mixed planting.

Grassland and Arable

Grassland covers c.77% of the LCA and almost nine-tenths of this is improved pasture. Except for small pockets of damp grassland along streams and between drumlins, rough grassland is confined to cut-over peatlands; in the north on the uplands between Caldanagh and McKeowns Hill, and in the south around Chesney's Corner. Rough grassland is frequently intermixed with patches of heath and remnant bog. Some is rush dominated whereas other parts are a mosaic of common heather and purple moor grass with stands of common bent and wavy hair grass. These rough grasslands, together with intermixed cover types, provide habitats for waders, including **curlew**, and for **Irish hare**.

Improved pastures generally have low biodiversity as a result of relatively intensive management. Some of the pastures are sown grasslands dominated by ryegrass and few other species - low biodiversity is in-built. Other grasslands have been converted to improved pastures through management. High levels of grazing or repeated cutting for silage, high inputs of fertilizers and slurry, and selective herbicides serve to reduce diversity of both flora and fauna.

Arable land (includes grass re-seeding) accounts for c.9% of the land cover; this compares with the Northern Ireland average of around 6%. Apart from the higher land with its peatland and forestry, arable land is scattered throughout the LCA with no spatial concentrations.

Although pastures and arable dominate the land cover of the LCA and have a low biodiversity, there are records of many of the Priority Species of farmland birds, including **yellowhammer**. The generally well-maintained hedgerows in the LCA are important contributors to biodiversity in improved grasslands and arable land providing a refuge for many woodland and farmland plants and animals.

Heaths and Bogs

In the north of the LCA **blanket bog** is extensive and although much has been cut-over, reclaimed for grazing or afforested, there are some intact areas remaining. However, as altitude declines southward, classification into blanket or lowland bog becomes more difficult.

To the north of Craigs Wood only small fragments of intact blanket bog remain; cut-over bog is extensive and there is a considerable amount of active and recent machine cutting. To the southeast of the wood intact blanket bog is more extensive, although threatened by machine cutting. Common heather dominates with hare's tail cotton sedge and a generally high ground cover of bog mosses (Sphagnum species). There are also hummocks, some of the higher ones with the lichen Cladonia impexa, and uncommon plants include the black bog-rush.

Whereas White Hill bog is cut over and has active cutting with areas of bare peat, Saugh Island Bog has intact bog. However, Saugh Island is difficult to classify because it lies at intermediate altitude (c.150m); soundings suggest that it is a raised bog formed over a basin (peat of over 7m depth) within a general area of blanket bog. The least disturbed part lies in the northwest where the vegetation is of common heather, cross-leaved heath, deer sedge and cotton sedges and the cover of bog mosses is high. There is also a good micro-topography of hummocks (some with the rare Sphagnum fuscum) and hollows, some of which are pools. Despite drainage of the western part and active and recent cutting around the margins, the site represents a good example of a raised bog over a basin with diversity of structural and micro-topographical features, and of habitats and species. The (possibly) **lowland raised bogs** at Casheltown, Ballybollen and Groggan are similarly affected by past and recent cutting, although Ballybollen has some intact remaining.

The peatlands of Long Mountain have one of the concentrations of machine peat cutting in Northern Ireland, as well as some hand cutting. This poses a severe threat to local biodiversity and to internationally important habitats - Northern Ireland has a significant proportion of Europe's peatlands. Machine cutting leaves areas of bare peat that only

slowly become colonised; cotton sedge and deer sedge are often dominant with the bog mosses only re-establishing after many years. Repeated cutting of the same site, as occurs in several parts of this LCA, means of course that there is no recovery.

Heath in the LCA has developed mainly in areas of cut-over or drained bog or where thin peat has extended from basins over a rock outcrop. The latter situation can be seen at Rabbit Rock where a rock ridge extends between two blanket bog areas; the undulating ridge is mostly grassy, but parts are dominated by bell heather with common heather less frequent.

Wetlands and Lakes

Patches of **fen** in this LCA are generally small and associated with small ponds or loughs. The two small loughs at The Rock have bottle sedge and soft rush and these species intermittently dominate the fringe of Lough Naroon. The only lake to be surveyed by the NI Lake Survey was Artoges Dam, which was classified as a low priority type. A fen was noted as present. It is likely that the other small loughs, being within peatland, will have low levels of nutrients but their status for biodiversity requires investigation.

None of the rivers have records of Priority Species, but it should be noted that they feed into major rivers that have both Priority Species and are salmonid rivers.

Key Issues

General actions for UK and NI **Priority Habitats** and **Priority Species** are detailed in the **Habitat Action Plans** and **Species Action Plans**.

WOODLANDS

Issue: low woodland cover of variable biodiversity value

Actions:

- enhance the biodiversity value of demesne/parkland woodland through control of grazing and felling; by encouraging planting of saplings of the standard trees; by preventing further loss of parkland; by retention of fallen and veteran trees (particularly for bryophytes, ferns, fungi and fauna)
- further study of the history and ecology of demesne and other broadleaved woodlands particularly any ancient and long-established, as a key to future management

- encourage planting of broadleaved woodlands through appropriate grant schemes, rather than the small conifer plantations which are of poor biodiversity and landscape value.

GRASSLAND AND ARABLE

Issue: poor biodiversity of farmland

Actions:

- maintain and improve field boundaries especially hedgerows . This may be achieved through adoption of correct cutting cycles; hedge laying and replanting where necessary; leaving saplings uncut to develop into hedgerow trees; avoidance of spraying with fertilizers, slurry, herbicides; provision of wildlife strips and conservation headlands around fields; and limitation of field amalgamation
- encourage (through participation in Environmental Schemes) adoption of less intensive management of pastures to allow reversion to more species-rich grassland and protect unsown areas of species-rich grassland
- leave stubble over winter, rather than autumn ploughing, to increase food resources for farmland birds; spring sown cereals are beneficial to breeding farmland birds.

HEATH AND BOGS

Issue: raised bogs/blanket bogs are of national and international importance; this LCA contains some good examples of diverse peat bog habitats

Actions:

- maintain the integrity of existing lowland raised bogs by for example, preventing infilling, fly-tipping, fires, new drainage and new peat cutting
- consider restoration of raised bog habitats through appropriate water level management and phasing out peat cutting
- maintain the remaining intact blanket bog by preventing further drainage, extension of peat cutting, and fires and by removal of conifers colonising from adjacent forests
- consider restoration of blanket bog by damming drains and appropriate water level management
- prevent new forest planting on blanket bog

WETLANDS

Issue: small loughs and rivers of possible importance to biodiversity

Actions:

- protect water quality of lakes and rivers through nutrient management, thus
- promote and encourage existing good farming practices so that streams are not polluted by run-off from agricultural land or seepage from silage pits
- monitor, and reduce if necessary, suspended sediments in rivers that come from peat cutting, noting that this may affect biodiversity in rivers in adjacent LCAs
- monitor streams in relation to expansion of rural housing and associated septic tanks
- consider further survey of small loughs and rivers to establish importance for biodiversity