

Northern Ireland Landscape Character Assessment 2000

LCA 30 Sperrin Foothills

Landscape

Last updated: 11 February 2010

Key Characteristics

- varied landform; typically rounded, dome-shaped hills and deeply dissected valleys, with a complex, undulating landform
- steep winding valleys, with waterfalls and dense woodland beside river
- diverse landscape pattern with transition from steep wooded valley sides to brown moorland summits or extensive moss within short distances
- hedgerows enclose all fields, becoming gappy with wire fencing on higher land; stone walls in areas of higher land close to the Sperrins
- relatively dense tree cover with numerous hedgerow trees and small copses; landscape becomes more open on elevated slopes
- dense network of roads and small settlements, with pressures for more development

Landscape Description

The Sperrin Foothills lie to the north and west of the Sperrins and include the rounded summits of Slievekirk (370m), Eglisk (277m), the Highland Hill complex, Crookdooish (321m) and the river valley systems of Burn Dennet and the Faughan River. Fast-flowing streams have eroded deep, winding valleys, carving the landscape into rounded, dome-shaped hills. It is a dynamic landscape, with neat, rolling farmland, steep, wooded valleys and rounded 'caps' of moorland on the summits of the higher hills. Glacial moraine often forms a complex, steeply undulating landform on the valley sides; loughs and areas of peaty marsh, such as Lough Ash, are occasionally found in poorly-drained hollows. A well-enclosed geometric patchwork of fields and hedgerows sweeps up and over the summits of the smaller hills and ridges, giving the landscape a neat, domestic character.

All the fields are enclosed by hedgerows and wire fencing and there are numerous hedgerows trees, particularly towards the lower slopes. Mature beech trees are an important local feature. The field pattern breaks down on the steepest slopes and is replaced by broadleaf woodland. At the centre of the valleys of Burn Dennet and parts of the River Faughan, where the river flows within a pronounced cutting, the valley sides and riverbanks are clothed in dense woodland. Local roads, often with steep hedgebanks, generally skirt around the hills, following the contours, except in areas of peaty marsh, where they are straight and raised on embankments. Angular, branching roads often form a dense network with farms and houses scattered alongside. The hill-top town of Dunnamanagh is the largest in the area, but there are numerous small settlements on the mid-slopes of valleys; most are at junctions related to stone bridges over rivers. Many of the buildings are of white render and stand out clearly as a broken line in views across the valleys. The ruined castles of Dunnamanagh and Altinaghree are prominent high on the valley sides.

Landscape Condition and Sensitivity to Change

The quality of this landscape varies. The condition of the land improves with distance from the Sperrins and on well-drained land; fields on more elevated slopes tend to be less well-managed, with thistle and scrub encroachment in some areas. Hedgerows are an important influence on landscape character and there is some evidence that they have been removed to form larger fields in areas of relatively good quality land. Pressure for built development is very evident, with numerous examples of modern bungalows of designs which are not appropriate to such a rural setting. The deeply undulating, varied landform and relatively dense tree cover have helped to accommodate much of the recent development but in places it is visually intrusive and there is little capacity for more. Sand and gravel pits are common on the edges of the valleys, where glacial moraine provides an available source and there are many examples of quarries which form visual scars in the landscape.

Principles for Landscape Management

- The management and restoration of hedgerows and stone walls on the upland margins of the Sperrins will conserve the diverse landscape pattern
- Small-scale forestry is appropriate to avoid swamping the diverse landscape; the small, rounded hilltops are especially vulnerable

- Sand and gravel quarries have devastated the valley landscape near Fawney, on the NE bank of the Burn Dennet. There is scope for careful restoration of such sites, with regrading and planting with native species.

Principles for Accommodating New Development

- The most appropriate location for built development is within existing settlements, which generally have robust landscape settings; ribbon development is often visually intrusive and may block valley views
- If new development is carefully sited so that it is sheltered by the natural landform, hedgerow patterns and woodlands, it may be successfully integrated within the complex valley landscapes.

All potential building sites should be carefully analysed from the opposite side of the valley so that decisions about siting and design take account of the close views from one side of the valley to the other.

Sperrin Foothills Geodiversity Profile

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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 North Derry Uplands and Sperrin Mountains. This region has a composite geological structure. In the north, the North Derry Plateau is wholly developed on basalt and defined by a steep, unstable escarpment to the west and a set of structural benches dipping gently to the east. Southwest of this plateau land, and beyond the Glenshane Pass, schists and quartzites form the rounded, whaleback ridges of the High and Low Sperrins. The incised, steep-sided valleys of rivers such as the Glennelly and Owenkillew accentuate the southwestwards, Caledonian structural trend of the Mountains. Late Glacial ice recession from around the mountains and the creation of temporary ice-dammed lakes has left valley floors and slope foot zones mantled in thick, complex glaciofluvial deposits.

Northwest of the Sperrins is a dissected block of country underlain by schists that forms the Loughermore-Altahullion hills and the Middle Faughan basin. The Sperrin Foothills lie to the north and west of the Sperrins and include the rounded summits of Slievekirk (370m), Eglish (277m), the Highland Hill complex, Crookdooish (321m) and the river valley systems of Burn Dennet and the Faughan River. Fast-flowing streams have eroded deep, winding valleys, carving the landscape into rounded, dome-shaped hills. It is a dynamic landscape, with neat, rolling farmland, steep, wooded valleys and rounded 'caps' of moorland on the summits of the higher hills. Glacigenic and glaciofluvial deposits often form complex, steeply undulating landforms on valley sides. Loughs and areas of peaty marsh, such as Lough Ash, are occasionally found in poorly drained

hollows. The west of the LCA has a high aesthetic value because of the visually attractive, deeply dissected glaciofluvial terraced infill occurring along the axis of the Burn Dennet river valley and the girdle of heather covered Sperrin mountains which form a hilly backdrop to the better managed land along the axis of the Dunnamanagh basin. The deep, steep-sided, often wooded, meltwater channels cut into the deposits infilling the upland valleys provide abrupt and visually pleasing topographic contrasts to the gentle gradients of the surrounding mountains.

Sand and gravel pits are common on the edges of the valleys, where glaciofluvial deposits provides an available source, and there are many examples of quarries that form visual scars and have devastated the valley landscape such as near to Fawney, on the NE bank of the Burn Dennet. Key elements in the landscape include:

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. The older formations can be upside down (tectonically inverted).

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

Carboniferous - about 350 million years old
Barony Glen
Dalradian (Neoproterozoic) - about 600 million years old
Un-named metabasites
Ballykelly
Dart - Claudy
Dungiven - Aghyaran
 Newtown Stewart

This LCA is dominated by Dalradian (Neoproterozoic) strata of the Sperrins succession. Structural strike is dominantly east-west to northeast - southwest (NE-SW) with an anticline in the southwest and an overall northerly dip in the north. Metamorphosed limestones, basaltic pillow lavas are exposed with quartzites in the pits and crags of ESCR Site 315 at Craig. Sedimentary and structural features are well exposed at Kildoag Quarry (ESCR Site 332); the Alla Limestone Member is exposed at Drain Quarry (ESCR Site 331).

The Ballykelly Formation - Comprises granular, pebbly tourmaline schists in the northern tip of LCA30. Exposed in Tamnymore Wood (ESCR Site 334).

Two tectonic phases have affected the area: the Caledonian (Ordovician - Silurian) and Variscan (end Carboniferous). Caledonian deformation is very apparent throughout the Dalradian succession.

Quaternary (Drift) Geology

Northern Ireland has experienced repeated glaciations during the Pleistocene period that produced vast amounts of debris to form the glacial deposits that cover more than 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.

This LCA contains some of the largest expanses of Late Midlandian glaciofluvial sands and gravels in Northern Ireland. These are to be found in the valleys of a series of rivers that drain the Sperrin Mountains and flow northwest to join the Foyle. In the south west of the LCA, The Dunnamanagh Complex mainly occupies the structural low of the Dunnamanaghgh basin / Burn Dennet river valley (11,7km²). In the centre of the LCA, the Faughan valley contains significant elements of the Faughan/Dungiven Basins Complex. A small area of this complex also occurs in the northeast of the LCA in the Roe valley. Together, these two areas cover 15.5km². Finally, in the southwest of the LCA

there is a small area of the Foyle Valley Complex (2.29km²) including the Artigarvan Delta shared with LCA27.

The Dunnamanagh Complex comprises a range of Fluvioglacial landforms consist of thick, dissected accumulations of morainic, outwash and glaciolacustrine deposits, forming large-scale undulating belts, flat-topped valley-floor terraces, hummocky topography and spectacular examples of later meltwater incision. Sediment supply was from ice margins retreating generally south and southwest from the Faughan valley towards the Sperrin uplands to the south and Foyle valley to the west. A small area of this Complex also occurs in LCA 27.

The Faughan/Dungiven Basins Complex consists of glaciofluvial deposits that are primarily deltaic in origin and are situated along structural lows in the upper Faughan and upper Roe drainage basins. The area is of high scientific interest due to the presence of extensive glaciolacustrine and glaciofluvial deposits consisting of deltas, moraines, eskers and outwash plains occurring in close field associations. The high relief range allows pleasant views both from the basin bottoms and from the Sperrin valleys. There is a general lack of commercial sand and gravel production in the area except immediately east of Dunnamanagh and another, larger pit at Moyagh. Smaller areas of the Complex occur in LCAs 27, 29, 31, 33, 34 and 37.

The Foyle Valley Complex consists of a widespread assemblage of landforms that are genetically linked by formation during ice-margin retreat westward from the Sperrin valleys during the last deglacial cycle. Strong control on ice-margin configuration and meltwater drainage patterns was exercised by bedrock topography, serving to focus meltwater along the valley axes. This resulted in the formation of thick, flat-topped glaciofluvial terraces. Increases in sediment supply or temporary reductions in ice-margin retreat rates resulted in the accumulation of thick belts of hummocky moraine at Artigarvan and along the Derg River.

Key Elements

ASSI

061 ERVEY WOOD

Woodland with structural diversity and variation ranging from calcifugous to strongly flushed. Physical features include a number of small waterfalls and wet rock faces, as well as a series of high cliffs and a broad river flood plain.

Deglacial Complexes

The Dunnamanagh Complex

The area is of importance due to the large scale recessional moraine belts which record relative ice marginal positions during ice retreat and the control of upland bedrock topography on the ice-margin decay pattern of a decaying ice sheet. It demonstrates the deglacial sequence following the ice retreat from the Faughan Valley southwards and the spatial relationships between morainic belts and glaciofluvial outwash.

the Faughan/Dungiven Basins Complex

Deltaic deposits are preserved at seven principal locations and are grouped within three main altitudinal levels, representing the control of former ice-dammed lake levels on their formation. They are of special scientific interest, as their widespread extent and relationship to proglacial water levels implies that substantial, deep lakes were impounded along the Faughan and upper Roe valleys as Irish ice masses retreated southwards and Scottish ice advanced southwestwards into the lower Roe valley. The upper Roe (Dungiven) and middle to upper Faughan valley basins have been used for mineral aggregate production in the northwest of the province for approximately twenty years.

the Foyle Valley Complex

The complex has a high scientific value, for understanding the complexity of deglacial processes and records ice retreat westward from the western Sperrin valleys into the topographic low of the Foyle valley, indicating ice pressure from the direction of the Omagh basin to the south during the last deglacial cycle. Most of this Complex is in LCA 27, smaller areas in LCAs 20, 21, 26, 29 and 31.

Cumber delta (Faughan/Dungiven basin complex)

An extensive area (approx. 4 km²) of glaciolacustrine deltaic sand and gravel and hummocky gravel overlain by proglacial gravel which partially fills the Faughan valley bedrock depression immediately south of Claudy, Co. Londonderry. It is a site of excellent scientific importance and is a pristine example of deltaic morphology. demonstrating a late glacial proglacial lake at 126m O.D.. It also demonstrates proglacial sedimentological processes, ice frontal position and the direction of ice retreat in this region southwards into the Sperrin Mountains.

LISNARAGH MORaine AND OUTWASH (Dunnamanagh Complex)

This is a well-marked ridge across the Burn Dennet valley fronted immediately to the north by a valley-side glaciofluvial terrace. The Lisnaragh moraine is a discrete, but representative, example of the morainic landforms that were deposited during deglaciation in this area. The landform association marks a stage in the southward retreat of ice towards the Sperrin Mountains late in the deglacial cycle. The Lisnaragh moraine/outwash couplet is an integral part of an area of high aesthetic value. Pristine morainic ridges and deeply incised streams combine to produce high relief within a relatively low altitude range.

AGHABRACK OUTWASH (DUNNAMANAGH COMPLEX)

A strikingly flat surface to the west of the Burn Dennet lies behind and is separated from a hummocky moraine ridge by the meltwater-eroded trench of the river valley. Together with an esker ridge alongside a minor tributary of the Burn Dennet these features are an excellent example of a deglacial landform assemblage. Incision by meltwater has produced steep slopes, particularly along the margins of the Burn Dennet channel, resulting in considerable landscape interest. This is a largely unspoilt area on the northern edge of the Sperrins, and grades gradually into the lower mountain slopes.

Artigarvan moraines and outwash (Foyle valley Complex)

These moraines are a notable example of large scale moraine building in a valley setting that are of importance in understanding the complexity of deglacial processes during the recent glacial history of Northern Ireland. A well-marked belt of contiguous rounded ridges, piled against one another across the entrance of the Glenmornan River valley, marks halts in the retreat of ice from the western Sperrins into the Foyle valley. Geomorphologically, this is a pristine area, and landforms have been little disturbed by human activity. The rolling landscape, with steep ice contact and ice distal slopes, and deeply incised meltwater channels, has considerable aesthetic appeal.

Other sites/units identified in the Earth Science Conservation Review

315 Craig

Precambrian. Dungiven Formation. Relatively undeformed basalt pillow lavas. Limestone and quartzite closely associated.

332 Kildoag Quarry

Precambrian. Southern Highland Group. Quality outcrops of coarse-grained arenaceous rocks of Claudy Formation. Sedimentary and structural features well displayed.

334 Tamnymore Wood

Precambrian. Good exposure of lowermost stata of Ballykelly Formation.

331 Drain Quarry

Precambrian. Claudy formation. Lithology and structure of Alla Limestone Member. Good exposure and access.

AONB

The southern margin of the LCA lies in the Sperrin AONB (1968). This designation is indicative of the scenic quality of the landscape.

Sperrin Foothills Biodiversity Profile

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In the following account 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

- low woodland cover (c.2% compared with c.5.6% for Northern Ireland as a whole), but excellent examples of priority woodland types including upland oakwoods, upland mixed ashwoods and wet woodlands
- notable examples of other woodland, particularly hazel and hazel-oak woodland
- grassland is c.81% of the land cover, around 10% greater than for Northern Ireland as a whole
- improved pastures account for nearly three-quarters of the grassland, but rough grassland is widespread both on the foothills beneath the blanket peat and in the broad flat areas between the isolated rounded hills
- rough grasslands, both acid and damp neutral grasslands, important not only for plant species diversity but as habitats for mammals and birds, including breeding waders
- upland heathland, a declining habitat in the UK, common on the rounded hills
- almost no intact blanket or raised bog; most has been cut-over in the past and recent mechanised cutting is widespread
- main rivers are part of the Foyle catchment - of international importance to Atlantic salmon

Woodlands

Woodlands account for only c.2% of the land cover, which is low even for Northern Ireland (c.5.6%). Many of the woodlands are on the steep sides of rivers and streams and contain patches of several different types of woodland. Not only are these patches excellent examples of particular types, but together they enhance the biodiversity value of the woodland as a whole. Not all of these riverside or glen woodlands have been

investigated, but the following are representative of the diversity and species richness that may be found.

Corbylin Wood ASSI is an extensive semi-natural woodland where the variety of environmental conditions has resulted in several distinctive woodland plant communities and a richness of woodland plants that is amongst the best in Northern Ireland. The composition of the woodland reflects both management and local soil



conditions. Although the bulk of the wood occurs on acidic soils, there are also parts where soils are base-rich and wetter. Downy birch and mature oak generally dominate the canopy (upland oakwood), but where the soils are more base-rich, ash dominates (upland mixed ashwoods) and on wet soils alder is dominant (wet woodland). The shrub layer is dominated by hazel and in wetter conditions by willows. The herb layer reflects the acidic nature of the majority of the wood and is dominated by great woodrush with bluebell locally abundant. On base-rich soils, there is a notable increase in species richness with primrose, wood avens, sanicle and lesser celandine included and, in wetter parts, wood anemone, golden-saxifrage and remote sedge. The relatively rare bird cherry and wood fescue are also found in this woodland.

Silverbook Wood ASSI, is similar in its diversity of woodland types and species richness that result from different soil conditions - it too has upland oakwood, upland mixed ashwood and wet woodland - but in parts the canopy, in the absence of standard trees, is often of hazel. **Ervey Wodd ASSI** and **Altmoover Glen ASSI** also show variation from base-rich to acid woodlands.

Woodlands in which hazel forms the dominant canopy species, with some oak and birch and with alder and willow in wetter parts, are common along many of the rivers, including an extensive stretch along the Inver Burn, in the upper Burn Dennet and the Dunnyboe Burn. Some riverside woodlands have also been planted with non-native trees as in Altdarragh Glen where the north side has beech; the south side is a more typical hazel woodland with oak, ash alder and birch.

Woodlands are not confined to riversides, some occur on hillslopes, as at Creaghan Wood where there are stands of oak, of birch and of oak and beech over a dense hazel-birch cover. Whilst some of these hillside woodlands are semi-natural, often occupying short, steep or rocky slopes, others have clearly been planted as part of 'landscaping' of lands belonging to estates, and others are on abandoned wet fields or cut-over bog.

Small estate woodlands are scattered through the LCA, typically with much planted beech and oak; some of the oak is part of semi-natural woodland along streams that was taken into the estates. Scots pine and larch are quite common, particularly in estates of the latter part of the nineteenth century. Ash and sycamore have in some instances become very abundant. Some of the estates already planted by the 1830s, remain surrounded by woodland (**lowland woodland pastures and parkland**) and are at least 'long-established' woodland and semi-natural parts are probably ancient. Learmount was reported in the 1830s as having been planted 'in the last 30 years, chiefly with fir'; today the parkland is in State Forest and although there is much Sitka spruce, Norway spruce and larch, there is also beech, oak and 'intimate broadleaved mixture'.

Other State forests are found at Knockbrack, where larch and Sitka spruce dominate although there are some planted mixed hardwoods and some semi-natural wood along the stream; that, like most of the streamside woodlands in the LCA, was present in the 1830s. New coniferous plantations are also located on the hillsides above Lisdillon, on the eastern slopes of Mullaghmeash Hill and to the east of Raspberry Hill.

Grassland and Arable

Grassland is c.81% of the land cover, around 10% greater than for Northern Ireland as a whole. Improved pastures account for nearly three-quarters of the grassland, but rough grassland is widespread both on the foothills beneath the blanket peat and in the broad flat areas between the isolated rounded hills. Arable land (including grass re-seeding) covers c.3% of the LCA.

Improved pastures generally have low biodiversity as a result of relatively intensive management. However, the degree of improvement in the LCA is varied. 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.

Biodiversity in areas of improved pastures and arable is often concentrated in hedgerows. Indeed, they may be the most significant wildlife habitat over much of lowland Northern Ireland, especially where there are few semi-natural habitats. Hedgerows are a refuge for many woodland and farmland plants and animals. In this LCA management of the predominantly hawthorn hedgerows is variable; some of the larger fields have dense, well-maintained hedges, but commonly the hedges are gappy and reinforced by wire. Hedgerow trees are common, especially at lower elevations, - most frequently of ash but beech is locally significant. There is some field amalgamation,

especially on upper margins where there has been reclamation.



Much of the rough grassland occurs on the upland margins where it may have clumps of rushes separated by grazed grasses, be rush dominated or may merge into more acidic areas on the margins of cut-over blanket bog where wavy hair grass, mat grass or purple moor grass

may be frequent. However, there are rough grasslands in the lowlands too; they surround some areas of cut-over lowland bog, occur in field corners or comprise one or two fields in low situations. Depending on situation, these generally damp grasslands may be acidic, with species similar to the upland margins, or neutral with high or dominant rush cover and include other species such as tufted hair grass and meadow sweet.

Rough and damp grasslands are an important element in the biodiversity of the LCA, not only for the increased diversity of plant life, but also because they provide habitats for Priority Species of mammals and birds; thus the **Irish hare** finds refuge in these less-managed grasslands and waders - including curlew and snipe - have breeding sites.

Although the biodiversity of improved pastures and arable is generally low, farmland, together with the intricate mix of woodlands, damp grasslands and bogs within it, attracts many of the Priority Species of birds - **bullfinch, curlew, reed bunting, song thrush, spotted flycatcher, yellowhammer** and **skylark** are widespread.

Heaths and Bogs

Heath, dominated by common heather is frequent on the rounded hills of the LCA; in many places it has come to dominate cut-over blanket bog, but it is also dominant on some slopes that are too steep for deep peat to form. Its distribution is also affected by grazing history; sharp boundaries may be found between heather dominated land and acid grassland - the latter a result of a history of heavy grazing that has removed the heather cover. **Upland heathland** is a declining habitat in Britain and Ireland, partly resulting from forestry and land reclamation but also from overgrazing in recent times. The widespread occurrence of this habitat in the LCA is therefore of local and national significance, and because the habitat is largely restricted in Europe to the northwest seaboard, is also of international importance.

Blanket bog is common in the LCA, but because altitudes are lower and the rounded hills have steep slopes, it is not as widespread as in adjacent LCAs that include the main Sperrin Mountains. Almost all of the blanket bog is cut-over, generally old cutting, and in consequence much is now occupied by acid grassland or heather heath. One area of intact bog in Farkland in the northeast abuts onto the extensive commercial extraction that has taken place at Altahullion (see LCA 34)

Lowland raised bog is difficult to separate from blanket peat in this LCA because of the intermediate altitude; they should probably be regarded as raised bogs within a transitional zone between lowland and upland blanket peat. However, as with blanket bogs almost all have been cut-over and several have been colonised by trees; birch tends to dominate on the drier peat surface whereas around the wetter edges alder and willow may be found. One area of intact raised bog at Aghabrack has been subject to recent machine (compact harvester) extraction. Such extraction has been common in the LCA and because of its prevalence, has been on cut-over bog.

Wetlands and Lakes

Lough Ash is one of the largest of the lakes in this LCA surveyed by the Northern Ireland Lake Survey. It has been classified as mesotrophic; that is, characterised by having a middle level of nutrients between nutrient poor (oligotrophic) and nutrient rich (eutrophic). **Mesotrophic lakes** potentially have the highest macrophyte diversity of any lake type. Furthermore, relative to other lake types, they contain a higher proportion of nationally scarce and rare aquatic plants. This is an increasingly rare type of lake in Northern Ireland because the nutrient status of many is being increased through input of

water from agricultural land that has had applications of fertilizers and slurry. Moor Lough is also mesotrophic and of a type that has the most diverse aquatic macrophyte flora of the upland lakes. Mill Pond is of no priority type. Several other lakes occur in the LCA, but have not been surveyed.

The two main rivers in the LCA are the R. Faughan and the Burn Dennet and both have many steep-sided tributaries. There are no records for Priority Species, but the rivers are part of the Foyle catchment that is of international importance for Atlantic salmon; that part of the system in Northern Ireland is the largest salmon and trout fishery in the country.

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, but some of high 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 control of grazing in broadleaved woodlands along streams to foster regeneration and if necessary, encourage replanting of canopy species
- encourage planting of native broadleaved plantations, 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, particularly lowland damp pastures
- 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: loss of upland heathland and decline in its biodiversity

Actions:

- promote membership of ESA and other environmental schemes through consultation with farmers and thereby
- control grazing intensity on existing heathland to encourage development of heathland and of heather of different ages
- control grazing intensity on some upland grassland to promote return to heathland
- manage heather so that it does not become 'leggy' and has different ages and structures (where grazing is not used consider burning, cutting - but following guidelines)
- discourage 'reclamation' to pasture fields around the heathland margins
- discourage afforestation

Issue: although there are no extensive intact raised bogs or blanket bogs, the cut-over bogs do provide important habitats and species diversity

Actions:

- maintain the integrity of existing raised bogs by for example, preventing infilling, fly-tipping, fires, new drainage and new peat cutting
- restore raised bog habitats through appropriate water level management, tree removal (where only sporadic) and phasing out peat cutting
- allow bogs already colonised by trees to develop into woodland
- prevent new forest planting on raised/blanket bog
- consider impacts on biodiversity of schemes to reclaim marginal blanket bog

WETLANDS

Issue: important examples of upland mesotrophic lakes and rivers of international importance for salmon

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
- continued monitoring of streams below industrial plants, sand pits etc.
- monitor streams in relation to expansion of rural housing and associated septic tanks/sewage treatment plants
- monitor streams and rivers in relation to sediments from peat cutting so that spawning and nursery beds of salmon are not affected