

Planning for Natural Heritage: Planning Advice Note 60

PAN 60

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Scotland's Natural Heritage

A UNIQUE RESOURCE

1. Scotland has a great diversity of natural heritage, from its wild mountains and rugged coastlines, to the gentler beauty of its farmland and the designed landscapes of town and countryside. This diversity of landscape, habitat and wildlife reflects Scotland's varied geology and topography and its special geographical and climatic position on Europe's North Atlantic seaboard. Scotland's unique natural heritage is also the product of past and present interactions between natural processes and human activities. Thus, while there is little today which can be considered entirely natural in strict ecological terms, there is much to be valued and conserved.

2. The Scottish Executive is committed to safeguarding Scotland's unique natural heritage and integrating the principles of sustainable development into all Government policies. This Planning Advice Note (PAN) provides advice on how development and the planning system can contribute to the conservation, enhancement, enjoyment and understanding of Scotland's natural environment and encourages developers and planning authorities to be positive and creative in addressing natural heritage issues. It complements the National Planning Policy Guideline on Natural Heritage (NPPG 14), with examples of good planning practice in relation to natural heritage drawn from across Scotland highlighted in a number of case studies.

People and Natural Heritage

3. Natural heritage may be found anywhere. It is not confined to designated areas or the special, the vulnerable and the rare. The accessible and familiar natural heritage which people experience from day to day makes an important contribution to local identity and the quality of life. Regular contact with nature offers benefits in terms of general health and well-being and a rich natural environment provides opportunities for a great variety of recreational and educational pursuits. Scotland's natural heritage is also a very valuable economic asset, providing opportunities for employment in a wide range of activities. The overall quality of our environment is important in the competition for new business investment.

4. The inter-relationship between development and natural heritage is crucially important in land use planning, as relevant in the urban context as in rural areas. Where it is managed well it can enhance the quality of place, where it is not it can devalue it.



The Framework

POLICIES AND INITIATIVES FOR POSITIVE ACTION

5. The United Kingdom and Scottish programmes for sustainable development accord the planning system a key role in the protection of the natural environment and the maintenance of biodiversity. However, the system operates within a wider framework of international agreements, Government policies and specific initiatives for positive action in relation to the environment and it is important that this is reflected in statutory plans and planning decisions.

6. The UK is a signatory to the UN Biodiversity Convention which provides an international framework for the conservation and sustainable use of the Earth's biological diversity and the equitable distribution of its benefits. The Convention requires that the components of the Earth's biological diversity should be used in ways which do not lead to their decline. Practical measures designed to safeguard biodiversity are set out in the UK Biodiversity Action Plan. 1 In Scotland, the Scottish Biodiversity Group is identifying national priorities and targets for species and habitats in conjunction with local authorities, non-governmental organisations and local communities. 2

7. The Scottish Executive's commitment to protecting, enhancing and promoting enjoyment of Scotland's natural heritage is reflected in a wide range of policies and initiatives. National Parks are being established to safeguard areas of outstanding natural heritage and legislation will be introduced to give the public a statutory right of responsible access to all land and inland water for recreation and passage. The Executive is keen to encourage more recreational use of the countryside and provide the opportunity for better understanding and greater awareness of rural activities and natural heritage. Local authorities will be required to co-ordinate the development of a core path network. Improved public access will also be taken forward by the Paths for All Partnership, which promotes greater use of existing paths and the provision of new ones.

8. The Executive considers that new development can play an important role in improving the environment and wishes to ensure that the conservation and enjoyment of the natural heritage bring benefits to local communities and provide opportunities for sustainable social and economic progress. The National Planning Policy Guideline on Rural Development (NPPG 15) emphasises the Government's commitment to encouraging active community involvement in economic and environmental renewal. The Local Agenda 21 process provides the framework within which local authorities and communities develop and implement policies for sustainable development at a local level.



Elgol on Skye is now a base for wildlife cruises set against the incomparable backdrop of the Cuillins.



Edinburgh's Green Belt

9. The Executive also wishes to ensure that architecture and the built environment are properly integrated into national strategies for sustainable development and the planning system is a key mechanism for achieving this. At the strategic level, planning has an important role to play in maintaining landscape character and the ecological integrity of natural systems such as river catchments. At the level of individual developments, it can help to secure well-designed, sustainable buildings which respect and complement the natural environment and promote design solutions which work with the grain of natural processes.

10. Land is a finite resource and restoring degraded land and the recycling of brownfield sites are essential elements of sustainable approach to development. The re-use of derelict and previously developed land offers substantial opportunities for improving the environment and enhancing natural heritage. In collaboration with local authorities, Scottish Natural Heritage (SNH) and the Forestry Commission, the Central Scotland Countryside Trust is promoting the Central Scotland Forest which will, over time, substantially improve the landscape between Edinburgh and Glasgow. In another Central Scotland initiative, the Millennium Link project has secured Millennium and other funding to restore the Forth and Clyde and Union Canals to navigable condition, creating new opportunities for economic development, recreational activity and environmental improvement. The planning system has an important role to play in ensuring that such initiatives complement and reinforce each other to improve the quality of the environment of people living in the Central Belt.

11. Well established planning mechanisms such as Green Belt and "countryside around towns" policies protect the landscape settings of our towns and cities, while Regional and Country Parks provide opportunities for urban populations to gain access to attractive areas of countryside for recreation and the enjoyment of the natural environment.

Networks of green open space in and around our urban areas make it possible for people to maintain daily contact with nature and offer opportunities for local communities to play an active part in caring for the environment.

12. The planning system has a vital role to play in safeguarding the natural heritage and building environmental capital. It can help to create high quality sustainable environments which offer social and economic opportunities and weave the experience of nature into the fabric of everyday life. Within this context:

- maintaining and enhancing landscape character;
- providing for a diversity of wildlife habitats;
- making provision for a wide range of out-door recreational activities; and
- fostering opportunities for learning about the environment;

are all important planning objectives.

Planning for Natural Heritage

The treatment of natural heritage in development plans and supplementary policy guidance:

- assessing the resource and setting objectives;
- landscape character and biodiversity;
- local designations and greenspace.



Dundee City Council has gone further than most authorities by translating its aims and objectives for nature conservation into specific policies through the adoption of an Urban Nature Conservation Subject Local Plan.

PLANS AND STRATEGIES

13. Statutory development plans provide the land use policy framework for safeguarding and enhancing the natural heritage and it is important that they are up-to-date and clearly focused on agreed priorities and objectives. Structure Plans set out general policies and proposals on key strategic issues, while local plans and subject local plans provide locationally specific policies. Guidance on the natural heritage issues which should be addressed in development plans is set out in paragraphs 18 to 73 of NPPG 14.

This section provides advice on good practice in the treatment of these issues in development plans.

14. In addition to development plans, planning authorities prepare various non-statutory plans and strategies setting out their policies and aspirations for the natural heritage, or particular aspects of it. Statutory development plans require to focus on land use planning matters. Non-statutory plans and strategies can play a valuable supporting role, addressing related issues such as environmental management, access and community involvement. They can also be useful where unified policy guidance is required for areas which straddle administrative boundaries. They can therefore inform, complement and supplement statutory development plans, contributing to a stronger and more comprehensive policy framework and helping to ensure that development delivers positive natural heritage benefits. They cannot, however, substitute for statutory development plans.

15. Natural heritage interests are often addressed in other council-led strategies such as those dealing with community planning, transport, mineral working, forestry, fish farming, waste management, renewable energy developments and tourism. It is important that all of these strategies should share common natural heritage objectives. This can best be achieved by cross-departmental working within the context of a corporate approach to sustainable development, drawing where necessary on relevant external expertise. Development plans can assist in this by setting an agreed framework for future development and the maintenance and enhancement of natural heritage.

WORKING WITH SNH

16. Planning authorities should establish efficient and effective joint working arrangements with SNH to assist the agency in making a positive input to planning policy and development control. A number of authorities have agreed concordats or protocols with SNH designed to ensure that the aims and objectives of both organisations are compatible and effectively delivered. Topics covered under such agreements can include:

- matters on which the authority will consult SNH;
- timescales for responding to consultations;
- the content of SNH responses;
- the type and format of information provided by SNH;
- regular meetings, input to development plan preparation and pre-application discussions on major cases;
- informing SNH of planning decisions; and
- named contacts and responsibilities.

ASSESSING THE RESOURCE

17. A good understanding of the natural heritage resource is an essential prerequisite in developing a policy framework for future development. NPPG 14 states that planning authorities should gather relevant survey information in relation to natural heritage as part of the plan-making process (paragraph 66). In embarking on this task, it is important to appreciate that it is not necessary to start from scratch. A great deal of information already gathered by other agencies and organisations can be drawn upon to inform policy development. While several techniques for assessing the natural heritage resource have been developed, each involves:

- identifying the key characteristics and qualities of the local natural heritage and the processes involved in maintaining them;
- developing an understanding of how and why key characteristics and qualities may be changing and identifying the potential effects of change;
- setting objectives for the conservation, restoration and enhancement of the natural heritage and specifying how these should be achieved; and
- establishing a framework for monitoring change.

18. SNH has published guidance on the techniques available to planning authorities for assessing the natural heritage resource. 3 Geographical Information Systems offer a powerful new means of bringing together and using natural heritage information for land use planning and conservation purposes and many planning authorities now employ them.

CASE STUDY 1.



Using biodiversity indicators to improve housing layouts

Biodiversity is a key indicator of sustainable development. In Aberdeenshire, the Council has formed a partnership with The Robert Gordon University, developers and design and environmental consultants to promote more environmentally friendly housing layouts. As part of this project, the Aberdeenshire Sustainability Research Trust is recording the incidence of butterfly species before and after development on land at Blackdog, to the North of Aberdeen, as it has been established that butterflies are very good indicators of the general condition of the natural environment. It is intended that the research being undertaken at Blackdog should inform the development of good environmental practice in the layout of housing developments.

19. Monitoring change in the environment is an essential element of assessing the resource. A number of authorities are developing 'indicators' as a basis for monitoring changes in the environment, including natural heritage, and natural heritage indicators are an important component of the suite of sustainable development indicators being developed within the context of the Local Agenda 21 process.

SETTING OBJECTIVES

20. Setting clear objectives is an essential step in developing a planning policy framework for safeguarding and enhancing natural heritage. It is important that local people have the opportunity to participate in assessing the resource and setting objectives. Local Agenda 21 programmes, Local Biodiversity Action Plans and "Planning for Real" exercises can all help to promote active community participation. Achieving consensus on objectives is a vital part of the planning process. Natural heritage objectives can best be realised through close co-operation and partnership between public agencies, local communities and the private and voluntary sectors. Monitoring progress against an agreed set of natural heritage indicators is essential.



Landscape character assessment can be a valuable tool in developing locational policy in relation to windfarm developments.

21. The Scottish Executive's objectives for Scotland's natural heritage are set out in paragraph 6 of NPPG 14. The Natural Heritage Zone programme currently being developed by SNH divides Scotland into a number of distinct biogeographical zones in order to provide a strategic framework for the development of policy in relation to Scotland's natural heritage. Natural Heritage Zones are likely to be of value to planning authorities in setting broad strategic objectives and priorities in relation to the natural heritage. Landscape Character Assessments provide a basis for setting objectives and identifying opportunities in relation to landscape. Targets and priorities for species and habitats are being identified within the context of the Biodiversity Action Plan programme. Natural heritage indicators provide a basis for measuring progress towards natural heritage objectives and biodiversity targets. They can also be used to help determine the capacity of the natural heritage to accommodate further development.

22. The Forestry Commission is currently consulting on a Forestry Strategy for Scotland. The achievement of national forestry objectives will require effective partnership between Government agencies, local authorities, land managers and communities. Planning authorities can make an important contribution through their development plans, indicative forestry strategies and development control decisions.

LANDSCAPE

23. Safeguarding and enhancing landscape character is an important planning objective. Planning authorities can contribute to the protection and enhancement of landscape by:

- safeguarding the scenic quality and character of National Parks, National Scenic Areas, designed landscapes and wild land;
- setting clear policy objectives in relation to landscapes distinctive to the development plan area; and
- promoting high standards of siting and design and the use of appropriate materials.

Landscape Character Assessment

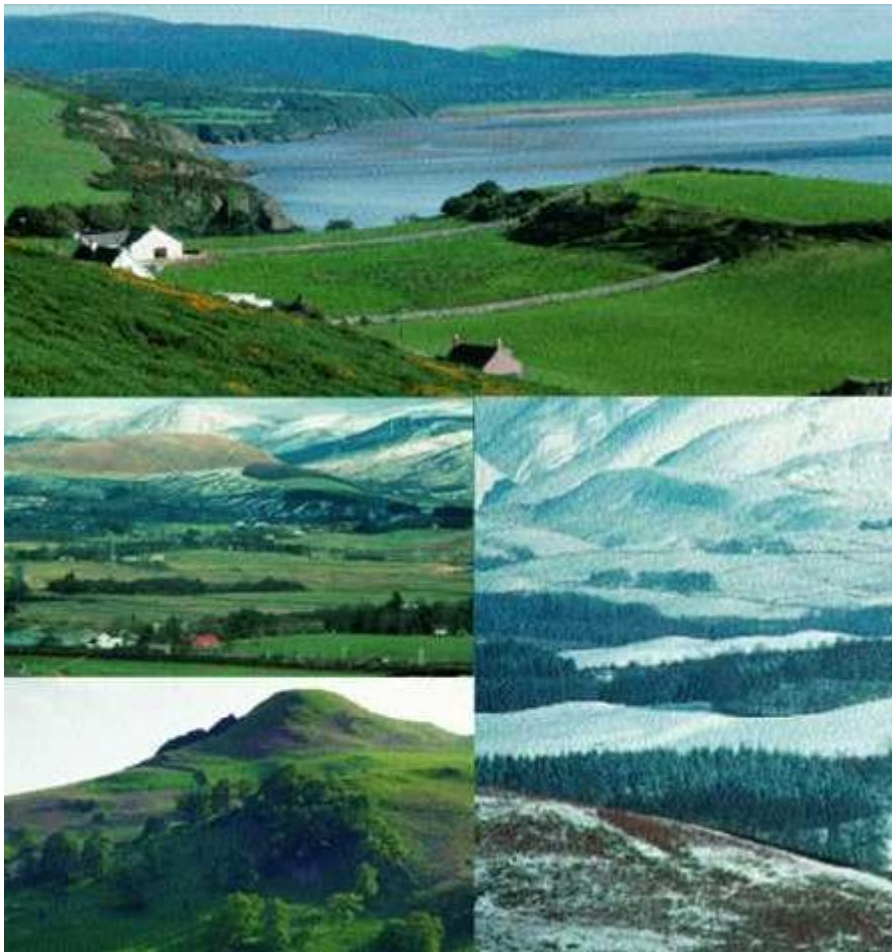
24. The SNH Landscape Character Assessment programme now covers the whole of Scotland. Its assessment reports, which generally cover individual local authority areas, summarise the evolution of the landscape, delineate landscape character areas, identify

development pressures which may significantly affect landscape character, and provide broad guidelines for maintaining, restoring and enhancing landscape quality.

CASE STUDY 2.

Dumfries and Galloway Landscape Assessment

The Dumfries and Galloway Landscape Assessment was a partnership project between Dumfries and Galloway Council, SNH, the Forestry Authority and Dumfries and Galloway Enterprise, and was the first regional scale landscape character assessment in Scotland. The study has been used to inform Council policy and guidance through the Structure Plan, Local Plans, a Wind Energy Strategy, landscape design guidelines for forests and woodland and pilot forestry frameworks.



25. Planning authorities are finding landscape character assessment to be of value in informing development plan policies; preparing locational strategies for mineral extraction, renewable energy developments and forestry; determining environmental and settlement capacity; reviewing Green Belt boundaries; designing land renewal schemes; determining individual planning applications; and responding to Woodland Grant Scheme consultations. It is a useful tool in identifying development opportunities as well as constraints.

26. Some planning authorities have concluded that an area-wide policy framework founded on landscape character assessment is preferable to the identification of specific areas as scenically important. This approach recognises that change requires to be managed with care in all landscapes, not only those which are designated. However, an

authority-wide approach need not preclude the identification of areas which have particular regional or local landscape value. NPPG 14 recognises the value of sub-national landscape designations in safeguarding landscape quality, and landscape character assessment provides the means of determining their extent.

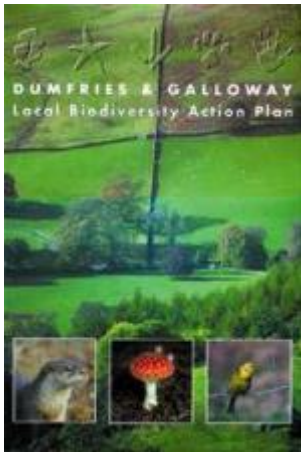
27. The National Planning Policy Guidelines on the Historic Environment (NPPG 18) and Natural Heritage (NPPG 14) both stress the importance of conserving the cultural aspects of landscape. In liaison with SNH, Historic Scotland and the Royal Commission on the Ancient and Historic Monuments of Scotland are undertaking a Historic Landuse Assessment which will provide a valuable complement to landscape character assessment in informing policy development and planning decisions.

BIODIVERSITY

28. Local Biodiversity Action Plans (LBAPs) are being prepared in many areas as contributions to the UK Biodiversity Action Plan. The LBAP is a mechanism for ensuring that nationally and locally important species and habitats in a given area are conserved and enhanced through focused local action. The priorities and targets for species and habitats established through the Biodiversity Action Plan process can be reflected in structure and local plan policies. LBAPs are prepared by partnerships of interested organisations and individuals and provide a means by which communities can participate in the setting of local natural heritage objectives. Further information and advice on the preparation and use of LBAPs can be found in the Local Biodiversity Action Plans Manual published by The Scottish Office and COSLA. 4 The Scottish Executive has also published a discussion document on the application of biodiversity planning principles to the road network. 5



CASE STUDY 3.



Planning for Biodiversity in the South West

The Dumfries and Galloway Local Biodiversity Action Plan has been prepared by a broad partnership of organisations and individuals with an interest in the sustainable management of the natural resources of the area. Working groups have agreed objectives for 23 habitats and 21 species, reflecting both national and local priorities. Local Species Action Plans in a loose-leaf format have been prepared for local priority species, an approach now being widely adopted throughout Scotland and the UK.

Dumfries and Galloway Council has employed a project officer to ensure that biodiversity priorities and targets are fully reflected in statutory development plans, development control decisions and local forestry frameworks.

The Dumfries and Galloway LBAP won a Scottish Award for Quality in Planning in 1999.

29. Planning authorities can contribute to the implementation of the Biodiversity Action Plan programme by:

- protecting key biodiversity interests within internationally and nationally designated areas;
- participating in the LBAP process and reflecting species and habitat targets in development plan policies;
- counteracting the loss, isolation and fragmentation of habitats through the development of habitat networks; and
- identifying opportunities to enhance biodiversity through development and land renewal.

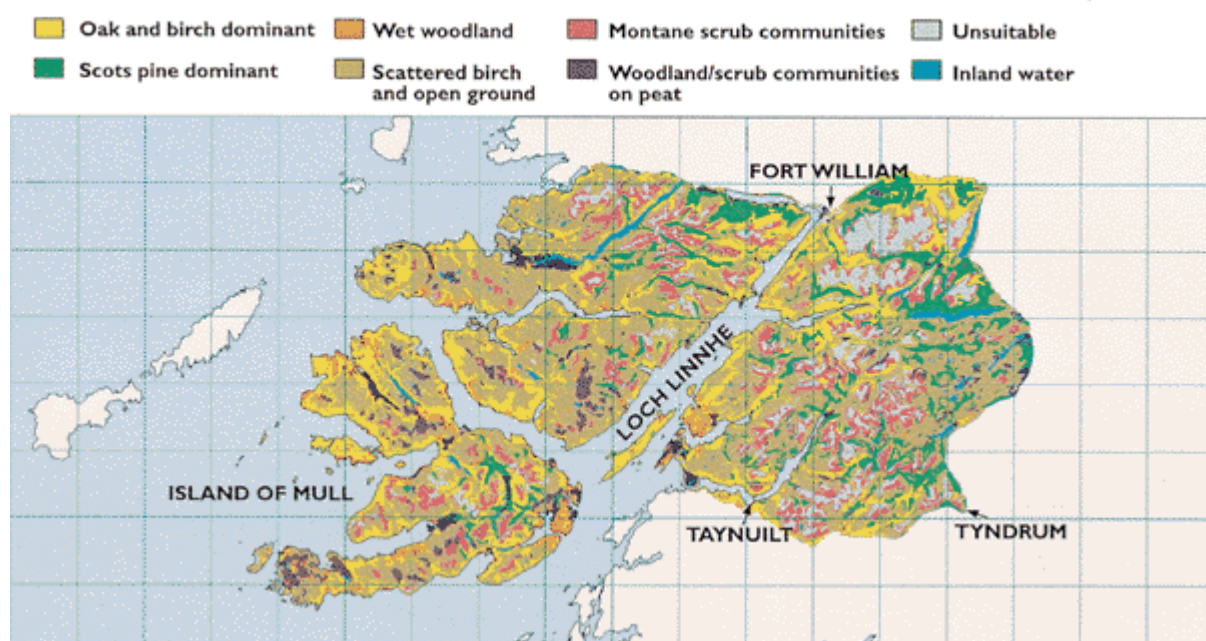
Further advice on planning for biodiversity will be issued in due course.

Native Woodlands

30. Native woodlands are valuable reservoirs of biodiversity. Scotland was once heavily wooded, but climate and land use changes over the past 4000 years have reduced forest cover to only about 12% of the country's land area. Our semi-natural woodland habitats in particular, have been reduced to small, generally isolated fragments. It is Government policy to expand the forest resource, especially the area under native woodland. As a

contribution to the UK Biodiversity Action Plan, the Forestry Commission is co-ordinating habitat action plans for a range of native woodland types.

31. Woodland habitat action plans set explicit targets for the expansion of native pine woodlands and upland oakwoods. To help guide the expansion of woodland cover, SNH has published a report entitled A Forest Habitat Network for Scotland. This considers the scope for promoting forest biodiversity by creating and strengthening linkages between existing woodlands to create a wider habitat network. In addition, SNH and the Macaulay Land Use Research Institute have developed predictive techniques based on the National Vegetation Classification (NVC) to determine the potential extent of different types of native woodland. This work can help to inform the setting of objectives in relation to woodland in development plans and indicative forestry strategies. In the Cairngorms, the Macaulay methodology has already been applied to produce a framework for native woodland expansion.



Potential distribution of native woodland in Lochaber and Mull

Information on Species and Habitats

32. SNH Area Offices and voluntary conservation organisations such as the Scottish Wildlife Trust and the Royal Society for the Protection of Birds can often provide valuable information on species and habitats. The Biological Recording in Scotland Campaign (BRISC) is promoting the development of a network of biological record centres throughout Scotland and, where such centres exist, they are important sources of local ecological information. The inventory of ancient and long-established woodland sites and the provisional inventory of semi-natural woodlands are available in digital format by arrangement with SNH via its local GIS facility. Substantial progress has already been made on the preparation of the Millennium Guide to Scotland's Woodland Resource which will provide much more detailed computer-based inventory of all Scotland's woodlands.

33. Additional species and habitat surveys may be needed where information is absent or incomplete.

CASE STUDY 4.



Fife Nature - a local biological record centre

Fife Nature, the local biological record centre for Fife, is based in the local authority's Department of Economic Development and Planning and is therefore well placed to support the planning service and other Council departments.

CASE STUDY 5.

Badger Survey informs planning in Aberdeen

While planners in Aberdeen had long been aware of the protection afforded to badgers and their setts under the Badgers Act 1992, lack of information about the location of badgers in the city made it difficult to give them adequate consideration when dealing with development proposals. The Council therefore enlisted the help of SNH to undertake a badger population survey. The completed survey has provided the Planning Department with details of setts and foraging areas to inform plan-making and development control decisions.



EARTH HERITAGE

34. Scotland's earth heritage - its rocks, fossils, landforms, soils and landforming processes - is an important element of our natural heritage. The best sites for rocks, fossils and landforms across Britain have been selected through a major exercise known as the Geological Conservation Review, and most of these are now designated as SSSIs. Planning authorities can contribute to the conservation of earth heritage by:

- protecting important earth heritage interests within nationally designated areas;
- considering the effects of development proposals on geomorphological processes, landforms and soils and actively seeking measures to avoid, reduce, mitigate or compensate for any adverse impacts;
- identifying opportunities to create or enhance earth heritage interests through development; and

- supporting the role of regionally important geological/geomorphological sites (RIGS) with respect to interpretation, education and the conservation of local diversity



Dore Holm, Shetland

ACCESS AND RECREATION

35. Planning authorities can contribute to the development of improved access for the enjoyment of natural heritage by:

- safeguarding key routes and path networks designed to meet the needs of communities and visitors;
- identifying locations for key recreational facilities; and
- making links with other important policy agendas such as health, social inclusion, and sustainable transport.

36. Regional and Country Parks provide opportunities for recreation and enjoyment of the countryside close to the main centres of population. While most Country Parks are owned and managed by local authorities, most of the land in Regional Parks is in private ownership and local authorities prepare management plans in order to ensure that recreation and the conservation of the qualities which people enjoy are well integrated with other land uses. It is important that policies and management objectives for Regional and Country Parks are reflected in statutory development plans. A subject plan has been prepared for this purpose for the Pentland Hills Regional Park.



37. A number of local authorities have supplemented their statutory development plan framework with non-statutory Countryside Recreation and Access Strategies. Such documents generally have three broad thrusts:

- the bringing together of all relevant local authority departments, local communities and other stake-holders to address access issues in their area;

- the development of policies and prioritised programmes for promoting desirable recreational uses and optimising public enjoyment of the countryside, while minimising adverse impacts; and
- the development of policies and prioritised programmes for providing, maintaining, improving and managing different types of access.

Aberdeenshire, Dumfries and Galloway and South Lanarkshire Councils have found recreation and access strategies to be useful in bidding for and prioritising the allocation of resources and in their work with the Paths for All Partnership. SNH has published advice on the preparation of countryside recreation and access strategies. To support the implementation of the forthcoming access legislation, it is also developing a national inventory of paths and tracks to assist local authorities in the identification of core path networks.



LOCAL DESIGNATIONS

38. Key elements of Scotland's natural heritage are safeguarded by national and international designations. Additionally, a range of regional and local designations are employed by local authorities and other organisations. Development plans play an important role in setting out policies for the protection of designated sites and bringing them to the attention of the public. Guidance on the status of local designations and their treatment in development plans is set out in paragraphs 60 to 62 of NPPG 14.

39. Local designations are of most value where they form part of a wider landscape framework and habitat network and contribute to the realisation of Natural Heritage Strategy, LBAP or Local Agenda 21 objectives. They offer opportunities to develop partnership working between local authorities, landowners, voluntary conservation organisations and the local community. Local designations and sound environmental management can enhance the quality of urban living and help to make an area more attractive as a location for economic activity.

Areas of Great Landscape Value

40. Planning authorities employ a variety of sub-national landscape designations in development plans, though only Areas of Great Landscape Value (AGLVs) have any formal basis. A sound principle in selecting areas for sub-national designation is that they should be valued beyond their immediate locale. In general, a single tier of sub-national landscape designation should be sufficient for practical planning purposes. Development guidelines designed to safeguard landscape character and quality can play a particularly valuable role in AGLVs.

Local Nature Reserves and Wildlife Sites

41. Local Nature Reserves (LNRs) are areas designated by local authorities because they are a locally important natural heritage resource. While their main purpose is to protect, maintain and enhance the natural heritage interests of the area, they also provide opportunities for environmental education, community involvement, and the improvement of access and amenity, and these aspects have become increasingly important over time.

CASE STUDY 6.

Bishop Loch Local Nature Reserve

Bishop Loch is a shallow body of water lying to the North of Easterhouse. Together with the surrounding land, it provides a transition from open water to marsh, grassland and woodland habitats within a relatively small area, and therefore supports a wide variety of wildlife. In 1986, an area of almost 77 ha. centred on the loch was designated as an SSSI.

In the late 1980s, the area around the loch was the subject of planning applications for opencast coal and peat extraction. While the proposals were refused by Glasgow City Council as contrary to development plan policy, and subsequent appeals were rejected, local people pressed for the area to be given greater protection. In response, the Council designated part of the SSSI and some adjacent land as a Local Nature Reserve in order to protect, manage and improve the site for wildlife and provide for environmental education and the informal enjoyment of nature.

The Council's then Planning Department took the lead in promoting the designation of the LNR and has played a major role in the funding and management of the project. The Scottish Wildlife Trust has prepared a management plan for the LNR and a programme of improvements has been implemented by the Council and the Kelvin Valley Countryside Project. Improvements include the planting of 10 ha. of native trees, woodland and shrub management, wildflower planting and the provision of a footpath network and 3 bridges. Habitat improvements have attracted 10 pairs of whitethroats and 3 pairs of bullfinches (a priority species) where previously there were none.

The aim is to provide an improved landscape setting for economic and residential investment in Easterhouse and a recreational amenity for its residents. The Greater Easterhouse Local Plan recognises Bishop Loch LNR as an important component of a wider "leisure belt" linking Hogganfield Loch in the West with Drumpellier Country Park in the East. The LNR was awarded Nature's Prize in the Scottish Environmental Awards of 1996.



Whitethroat



Bishop Loch LNR

42. Many planning authorities also work closely with voluntary conservation organisations in identifying additional non-statutory wildlife sites and securing appropriate protection and conservation management. Drawing on this experience, the Scottish Wildlife Trust (SWT) has published a manual of best practice in relation to the identification and protection of sites of local wildlife importance. 8 This provides advice on habitat survey and site selection and stresses that close liaison with land owners is essential. The approach adopted by the SWT is appropriate for use in lowland and coastal areas. However, it is not so easily applied to extensive, unenclosed upland areas because of the scale and nature of the habitats involved and the lack of clearly defined boundaries.



Communities and voluntary organisations can make an important contribution to environmental improvement and green space management.

43. The UK Biodiversity Action Plan recognises the part played by local nature conservation designations in safeguarding biodiversity and encourages local authorities to make provision for LNRs in local plans.

GREENSPACE

44. Green open space in and around our towns and cities provides a range of valuable wildlife habitats and recreational opportunities, creates attractive environments for living and working, and offers scope for local communities to play an active part in caring for the environment. The National Planning Policy Guideline on Sport, Physical Recreation and Open Space (NPPG 11) stresses the importance of safeguarding and maintaining all open space which benefits the public. NPPG 14 states that development plans should provide for the protection and enhancement of open space of natural heritage value.

45. "Greenspace" is an important component of open space. It can be defined as any vegetated land or water in or around the urban environment which has existing or potential natural heritage, amenity or recreational value. It can therefore encompass a wide range of different types of public and private open space including woodlands, parks, designed landscapes, wildlife sites, ponds and watercourses, areas of soft landscaping, open-air recreational facilities, play areas, and footpaths and cycleways. Research has demonstrated that diverse habitats in larger, consolidated, connected blocks offer the greatest benefits to wildlife, but all greenspace can enhance the quality of urban life.

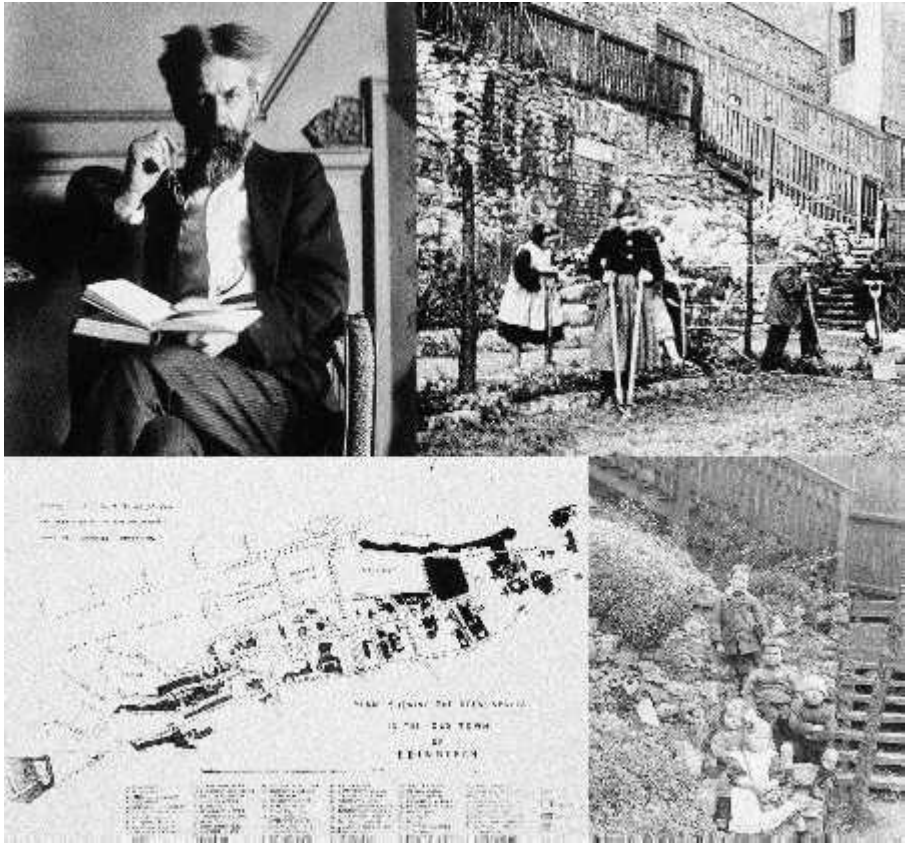
46. Local authorities can plan to improve the amount, quality and accessibility of local greenspace by:

- making an assessment of greenspace resources as part of their open space audits;
- reviewing the quality and accessibility of existing greenspace;
- identifying deficiencies in provision and working in partnership with the community and other organisations to devise creative remedies, even if these are temporary;
- making existing natural greenspace safer and more welcoming through improved design;
- undertaking the "green" management of land controlled by the authority, and influencing and supporting other landowners within their area; and
- providing guidelines for greenspace provision in new developments.

To secure greenspace in the longer term, it is important for planning authorities to make appropriate provision in their development plans. Structure Plans can establish the strategic principles for greenspace provision, while local plans set out the detailed policy position.

Greening the Edwardian City

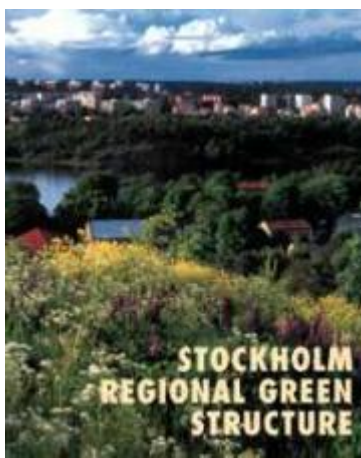
The Scottish environmentalist, Patrick Geddes, was a pioneer of the greening of cities. In 1909 he established the Open Spaces Committee of the Outlook Tower Association to carry out environmental improvements and create nature gardens in Edinburgh's Old Town. The project actively involved local people in improving the quality of their immediate surroundings and learning about the natural world.



Poorly managed greenspace can adversely affect the image of an area.



Glasgow's Green Network



Stockholm Green Structure

47. The quality of greenspace is of critical importance and merits at least as much attention as quantity and accessibility in the formulation of standards for open space provision. The maintenance of quality requires a commitment to long-term management. Local authorities are now placing greater emphasis on natural heritage considerations in their approach to open space management. Active community participation in environmental improvement and greenspace management can substantially enhance natural heritage value and amenity. It can also help to increase public respect for and understanding of the local natural heritage resource. In collaboration, SNH, Scottish Homes, COSLA and the Scottish House Builders' Association have issued practical guidance on the provision and management of greenspace in residential areas. 9

Green Networks

48. NPPGs 11 and 14 emphasise the need for a strategic and integrated approach to open space planning. The development of networks of quality greenspace can make a valuable contribution to the realisation of wider landscape and urban design objectives, complementing Green Belt and urban fringe policies. It can also be integrated with provision for nature conservation, education, recreation, countryside access and sustainable urban drainage, and the development of footpath and cycleway networks.

CASE STUDY 7.

Greenspace Planning in Dundee

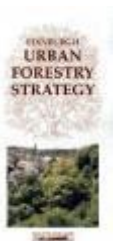


Dundee City Council has adopted a strategic approach to the planning and management of open space. Eleven Council departments and three external agencies were involved in the preparation of the Open Space Strategy which sets out a three-year action plan for safeguarding and improving public open space throughout the City. The strategy establishes an open space hierarchy ranging from spaces with a city-wide function to those serving neighbourhood and local requirements. It also sets accessibility standards and management objectives for each level of open space provision.

One outcome of this strategic approach has been the development of the Dundee Green Circular, a landscaped footpath and cycleway which will eventually encircle the City, providing citizens and visitors with safe and attractive links to parks, places of interest and open countryside. The greater part of it follows routes designated as wildlife corridors in the City's Urban Nature Conservation Subject Local Plan. Under the City Council's Paths for All Initiative, a wider footpath network is being developed, using the Green Circular as a spine.



The Dundee Green Circular



49. The strategic planning of greenspace to provide a framework for urban development is already well established in other parts of Europe such as Scandinavia and the Netherlands. In Scotland, **Dundee and Glasgow City Councils** have been in the forefront of the development of a strategic approach to open space provision and in

Glasgow and the Clyde Valley, the creation of a Green Network of environmental corridors, open space and natural and cultural features is a key element of the emerging development strategy.

Urban Forestry Strategies



Bergen City Forest

50. The trees and woodlands in and around our towns and cities are a particularly valuable component of the greenspace and Green Belt resource. Urban Forestry Strategies have been, or are being, prepared for Edinburgh, Aberdeen and Glasgow and the Central Scotland Forest. Given that urban land use is dynamic, it would be inappropriate to prepare over-prescriptive or inflexible plans for urban forestry. However, Urban Forestry Strategies have been found to be a useful means of augmenting the development plan framework, focusing resources, and promoting practical action. Within the context of a wider greenspace strategy, they can, for example:

- highlight the community and townscape value of trees and woodlands;
- contribute to the development of a forest habitat network;
- enable the organisations and individuals involved in the conservation and management of woodland to develop a more strategic approach to the resource;
- help to bring vacant and derelict land into positive management; and
- identify priorities for planting and management and areas where planting would be inappropriate.

SNH has published an advice note on developing the urban forest resource. 10



Edinburgh Park - a modern business development providing a high quality environment for people and wildlife.

Development and Natural Heritage

Opportunities to enhance natural heritage through the development process:

- *careful attention to siting and design;*
- *restoration of degraded landscapes and mineral workings;*
- *providing for wildlife on site.*

OPPORTUNITIES TO IMPROVE THE ENVIRONMENT

51. Planning and the development process can be powerful tools for improving the environment and realising landscape, biodiversity and earth heritage objectives. Development offers many opportunities to enhance natural heritage and good planning can contribute to the creation of landscapes which have a greater capacity to absorb development. Almost all significant development projects will offer opportunities to contribute positively to the environment. Working effectively together, planning authorities, SNH, developers, the local community and voluntary environmental organisations can ensure that opportunities to improve landscapes and promote nature conservation are identified and successfully realised.

SITING AND DESIGN

52. While inappropriate development can detract from scenic quality or adversely affect particular habitats, species or earth heritage interests, well designed and carefully sited development can complement the landscape and substantially increase natural heritage interest. NPPG 14 stresses that the scale, siting and design of new development should take full account of the character of the landscape and the potential impact on the local environment (para. 15). Landscape character assessment can play a valuable role in informing the development of a policy framework for the siting and design of new development.

53. Siting, built form, choice of materials and detailing are all important considerations in achieving developments which are in harmony with the surrounding landscape and build on its existing character. This does not imply the encouragement of pastiche development or a slavish adherence to traditional styles. It is important that design policies should be sufficiently flexible to allow for innovative approaches to design and the use of materials where appropriate. Further advice on siting and design can be found in the Planning Advice Notes on the Siting and Design of New Housing in the Countryside, Farm and Forestry Buildings, and Fitting New Housing Development into the Landscape (PANs 36, 39 and 44).

CASE STUDY 8.



Motorola, Bathgate - a high quality business environment

The Motorola plant at Bathgate in West Lothian illustrates the positive contribution which modern, high quality industrial developments can make to our natural heritage.

The development has been carefully designed to safeguard and enhance its parkland setting. The building, access roads and car parks have been well integrated into the existing policy woodlands and sited to minimise the loss of trees. Landscape architects, Carter McGlynn have handled the management of surface water imaginatively to create a series of water features which contribute positively to the overall landscape design and provide valuable new freshwater and wetland habitats.

The development demonstrates the potential ecological benefits of sustainable urban drainage systems (SUDS). A survey undertaken 5 years after the establishment of the ponds designed for wildlife found that they supported 85% of the species which would be expected to be present in similar natural ponds.

Working with Natural Processes

54. Applying ecological principles to the design of new developments can help to ensure that adverse effects on the natural heritage are minimised. The practical benefits of working with nature and maintaining natural processes are increasingly being recognised. For example, recent increases in the incidence of flooding and localised surface water quality problems in several parts of Scotland have been attributed in part to the impermeability of man-made surfaces and the nature of the drainage networks in urban areas. This has led to a better appreciation of the importance of natural areas - particularly wetlands and woodlands - whose vegetation, soils and hydrology make them more effective in trapping and filtering water. Similarly, studies have shown that trees help to regulate temperatures in urban areas and can improve air quality by absorbing sulphur and nitrogen pollution.

55. Soft engineering techniques which harness natural processes are increasingly seen as a more effective approach to managing flooding and coastal erosion. Designing with natural processes can also simply be more cost-effective, as it is usually cheaper to maintain a natural environment than to create and maintain an artificial one. More natural environments can produce other benefits. For example, even small wooded areas can be managed for timber, fuel and recreation, as well as providing valuable shade, shelter and wildlife habitats.

CASE STUDY 9.

Working with nature at Deeside Golf Club

Through the development of an 11-hole extension to their golf course on the River Dee floodplain, Deeside Golf Club in Aberdeenshire has not only improved the quality of its golf course but also dealt imaginatively with flood control and the ecological enhancement of the site.

As the site is prone to flooding, it has been necessary to elevate all eleven greens and additional earth-shaping has been undertaken to increase the character and interest of the course for golfers. The design of the extension ensures that open ditches and burns overflow into large wetland areas, which fill and drain naturally with changes in the water table.

Environmental consultants, Bell Ingram Rural Ltd., have prepared a detailed landscaping, habitat enhancement and management plan. There has been extensive planting of native tree species and wetland plants to create new habitats and increase amenity. Interpretative material has been prepared to provide golfers with information about the natural heritage value of the course.

The Scottish golf industry and conservation organisations have come together to establish the Scottish Golf Course Wildlife Group which has prepared advice on good practice in relation to nature conservation, public access and environmental management on golf courses. 11 Further advice on planning for golf courses and associated developments is contained in PAN 43.



Deeside Golf Club extension

56. The Government's commitment to working with natural processes in its approach to the landscaping of the trunk road network has been set out in a policy statement entitled *Cost Effective Landscape: Learning from Nature*. 12 The principles set out in this document have more general application in the design of roads and other types of development. Guidance on sustainable urban drainage systems has been published jointly by the Sustainable Urban Drainage Scottish Working Party and the Construction Industry Research and Information Association. 13

Design Guidance, Development Briefs and Masterplans

57. Guidance on siting and design can help to secure high quality developments which respect and enhance the natural heritage interest of an area. While it most commonly has an aesthetic emphasis, it can also be used to address matters such as catchment management and surface water drainage, qualitative and quantitative standards for open space provision and measures to safeguard or enhance biodiversity or earth heritage interests. The Rural West Edinburgh Local Plan, for example, sets out construction and

design criteria for developments likely to affect species identified as priorities in the Edinburgh Biodiversity Action Plan.

58. Development briefs and masterplans provide means of highlighting the natural heritage considerations which require to be taken into account in drawing up proposals for specific locations. They can identify features which should be safeguarded, open space requirements and measures to enhance the natural heritage value of the site. They can also play a valuable role in promoting species and habitats identified as priorities through the LBAP process.

CASE STUDY 10.

Lowland Crofting

The Lowland Crofting concept pioneered by West Lothian Council harnesses the demand for rural living to secure an improved landscape and other natural heritage benefits as a contribution to the development of the Central Scotland Forest. Development involves the subdivision of marginal farms in areas of poor environmental quality to create serviced plots within a restructured landscape incorporating substantial areas of new woodland.



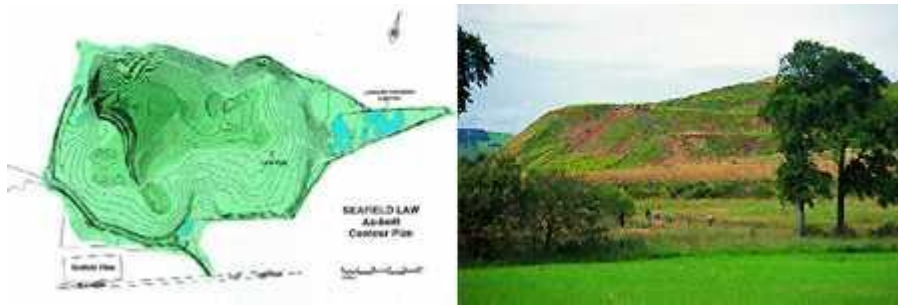
Lowland crofting development, West Harwood.

Since its adoption in 1994, the Lowland Crofting policy has resulted in the establishment of substantial areas of new broadleaved woodland, secured the future of sensitive natural heritage features, facilitated the creation of new wildlife habitats, and improved public access to the countryside by providing new footpath networks. It is also offering new opportunities for people to live and develop businesses in the area. The environmental objectives of the policy are likely to be applicable in other parts of Scotland.

CASE STUDY 11.

From Seafeld Bing...

In an imaginative land renewal project, West Lothian Council has remodelled an unsightly shale bing at Seafeld, near Livingston, to create a positive landscape feature echoing the natural crag and tail rock formations characteristic of the area. The project has also involved the creation of a range of new habitats, including woodland, wildflower meadows, ponds and wetlands.



Seafield Law is now a striking landmark from Bathgate and the M8 and is developing as a valuable resource for outdoor recreation.

The project received a commendation in the 1998 Scottish Awards for Quality in Planning.

...to Seafield Law

TRANSFORMING DEGRADED LANDSCAPES

59. Poor land management and past industrial activity have caused environmental damage over significant parts of Scotland and there are substantial areas of vacant and derelict land in the Central Belt. Land renewal and environmental improvement projects can offer major opportunities for restoring degraded landscapes, creating and enhancing wildlife habitats and earth heritage interest, and improving access for the enjoyment of natural heritage.

60. It should be borne in mind that vacant and derelict land can itself provide valuable wildlife habitats as natural colonisation takes place over time. In West Lothian, shale bings have become habitats for orchids, rare mosses and kestrels. Some are now managed as nature reserves, while other have been designated as SSSIs. The legacy of past industrial development can also have aesthetic and cultural value. The Five Sisters Bing, for example, is valued by local people as a landscape feature and safeguarded as a Scheduled Ancient Monument. In other situations, however, the skilled restructuring of bings and spoil heaps can greatly improve the quality of the landscape and create valuable new environmental and recreational assets.

61. Successful environmental renewal depends on multi-disciplinary teamwork, with landscape architects and ecologists both having essential roles to play and local people being actively involved.

CASE STUDY 12

Birnie and Gaddon Lochs

Near Collessie in Fife, close collaboration between the planning authority, Fife Sand & Gravel and Pioneer Aggregates (UK) Limited has resulted in the creation of two new lochs from a sand and gravel working. Progressive restoration to provide a range of wetland habitats was secured by means of planning conditions and a planning agreement. The lochs are now a valuable resource for conservation and outdoor recreation.

Birnie Loch was the Supreme Winner in the Scottish Environmental Regeneration Awards in 1994, the UEPG European Restoration Awards in 1997, and the Quarry Products Association Restoration Award in 1998. The site is now a Local Nature Reserve. It

attracts over 100 species of birds and provides habitat for a similar range of wild flowers.



Birnie Loch

RESTORATION OF MINERAL WORKINGS

62. The restoration of surface mineral workings can often provide substantial opportunities to create new and improved landscapes and habitats and increase earth heritage interest. This is particularly true for opencast coal operations, where large areas of land are involved and the heavy machinery employed can be used to reshape the landform and create or modify habitats with relative ease. The creation and enhancement of landscapes and habitats through mineral restoration is consistent with the principle of sustainable development and can make a valuable contribution to the achievement of biodiversity targets. While, at some locations, management for wildlife may be the most appropriate afteruse of a former mineral site, valuable habitat creation, landscape enhancement and earth heritage measures can also be incorporated into schemes where restoration for agriculture, forestry or some other purpose is the primary objective.

63. Where mineral operations are carefully planned and designed, adverse impacts on valuable species, habitats and earth heritage features can often be avoided or minimised. It is not possible to recreate every habitat which could be adversely affected by mineral development. However, there are situations where existing habitats can be extended or new ones created with relative ease. Where areas of habitat will be lost during the period of mineral working, it may be appropriate to seek agreement on mitigation measures such as the creation of new or improved habitats on adjacent land outwith the extraction area.

64. Suitable restoration and aftercare can create or enhance a wide range of habitat types and landscape features, including woodland, wet grassland, reed beds, open water and watercourses. It is important to ensure that restoration contour levels tie in with the surrounding landform and a good soil structure is critical in securing successful re-vegetation. Careful storage of overburden and the use of loose tipping techniques in its reinstatement are therefore essential.

65. Rivers and burns are often affected by opencast operations and on many sites they have to be diverted to allow extraction. The ecological value of these watercourses can often be enhanced through restoration and site management, particularly where the watercourse has become degraded as a result of past mining or industrial activity. Under the guidance of SEPA and other environmental experts, bank vegetation can be improved or larger works carried out to restore floodplains or reverse the affects of agricultural drainage.

66. Measures which can help to ensure that potential natural heritage benefits are realised include:

- detailed consideration of environmental matters at the application stage;
- agreeing restoration objectives with the developer at the outset;
- requiring the preparation of a mitigation and restoration management plan; and
- the appointment of an aftercare agent.

Adequate provision for long-term management is essential. While statute specifies a 5 year aftercare period, it may be desirable to secure agreement with the developer on a longer period of aftercare management where this is necessary to ensure that habitats are successfully established. Agri-environment and woodland grant schemes are designed to secure appropriate management regimes over suitable time periods.

67. Policy guidance on the restoration and aftercare of mineral extraction sites is contained in the National Planning Policy Guidelines on Land for Mineral Working (NPPG 4) and Opencast Coal and Related Minerals (NPPG 16), and the Executive intends to publish advice on good practice in relation to restoration, aftercare and after-use in a future Planning Advice Note. In addition, the Royal Society for the Protection of Birds (RSPB), in association with SNH, has prepared advice on opportunities for enhancing biodiversity arising from opencast mining activity. The Central Scotland Countryside Trust also has valuable experience in the restoration and aftercare of opencast sites and can advise on development proposals within the Central Scotland Forest area.

CASE STUDY 13.

Habitat restoration and enhancement at Airdsgreen



The peewee, one of the upland waders found in areas of opencast mining activity. The Ponesk Burn following diversion and restoration.

The development of the Airdsgreen opencast coal site near Muirkirk in East Ayrshire involved the permanent displacement of the Ponesk Burn. The new course incorporates pools, riffles, boulders and gravel banks, creating a wider range of habitats than were present in the original riverbed. New riparian woodland has been established on the banks of the burn.

Major Strategic Opportunities

68. The restructuring of the Scottish economy during the 20th Century has left a legacy of vacant and derelict former industrial land in parts of the Central Belt. While a significant proportion of this land is in the form of small sites, a number of large derelict or underused sites, such as Ravenscraig, Gartcosh and Bishopton, offer major strategic opportunities for redevelopment, environmental improvement and habitat creation.

WILDLIFE ON SITE

69. By thinking ahead, developers can either completely avoid or at least minimise and mitigate adverse impacts on wildlife. They can also ensure that opportunities to make a positive contribution to biodiversity are taken. Where wildlife interests are identified early in the development process, steps can be taken to incorporate appropriate measures as an integral part of the proposal.

70. In preparing proposals, it is good practice for developers to:

- establish at the outset whether the site is covered by any natural heritage designation;
- seek advice from relevant bodies including SNH and other wildlife organisations; and
- undertake an ecological survey to establish which habitats and species are present.

They should also bear in mind that the use of appropriate species in planting schemes and an ecological approach to site drainage can both enhance habitat value. It can often be important to timetable works to avoid sensitive periods such as the breeding season. It may also be necessary to take special measures to protect sensitive habitats while the development is being constructed. In conjunction with Babbie Group Ltd., Scottish Natural Heritage, English Nature and the Countryside Council for Wales have published joint advice on safeguarding and making appropriate provision for wildlife on development sites. 14

71. "Translocation" is the physical removal either of a habitat or of specimens of particular species of plant or animal from one site to another. The prospects of success are always uncertain and in situ conservation always preferable. Translocation is an option of last resort where the alternative would be the loss of the habitat or species concerned as a result of development and it should only be undertaken under expert supervision. A licence is required to move certain protected species.

CASE STUDY 14.



Creating a high quality environment at Ravenscraig

The site of the former steelworks at Ravenscraig in North Lanarkshire covers almost 460 hectares, making it the largest derelict site in Scotland. The Ravenscraig Regeneration Project, which will take some 20 years to complete, offers very substantial scope for strategic landscaping, habitat creation and the development of a Green Network to create a high quality environment for living and working in the 21st Century. A sustainability audit and baseline ecological studies have already been carried out in preparation for taking this work forward.

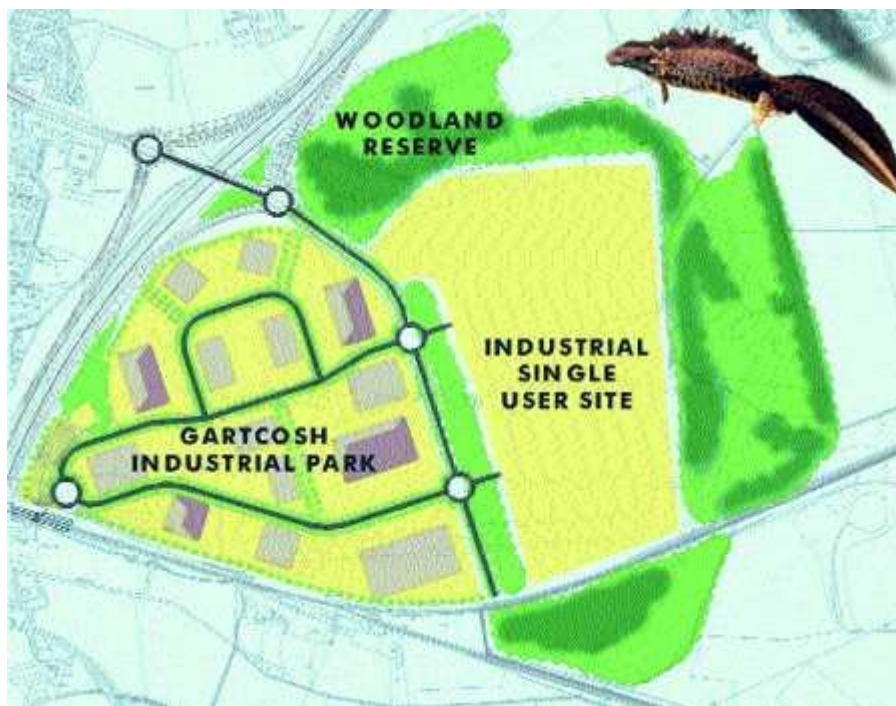
CASE STUDY 15.

Development Agency safeguards newts at Gartcosh

Scottish Enterprise Lanarkshire has amended its proposals for providing access to a major new business and industrial development on the site of the former Gartcosh steelworks in order to safeguard a colony of great crested newts.

An environmental impact assessment commissioned in respect of proposals for new slip-roads connecting the site to the M73 motorway identified the presence of the newts in several small ponds. The species enjoys special protection under the Habitats Directive and the agency has worked closely with North Lanarkshire Council and SNH to ensure that the newts and their habitat are not adversely affected by redevelopment.

The Masterplan prepared for the Gartcosh Industrial Park by consultants Ironside Farrar Ltd. provides for the protection of the wildlife interest of the site whilst also introducing opportunities for education, recreation and community involvement. The ponds and surrounding amphibian foraging areas have been safeguarded within a woodland reserve and a habitat management plan has been developed. Scottish Enterprise Lanarkshire has also funded the preparation of a Local Biodiversity Action Plan for great crested newts in Lanarkshire.



Wildlife in Buildings

72. Many animals have become adapted to man-made environments. A variety of species make use of buildings or other structures for roosting or breeding and they can sometimes be welcome guests. By taking account of the needs of these species when considering proposals for new development or development involving building restoration, planning authorities can make a valuable contribution to wildlife conservation and the enrichment of the local environment.

73. Bats and their roosts are protected under the Wildlife and Countryside Act and the Habitats Regulations. SNH can provide expert advice on developments which might

affect bat roosts and has published advice on the design and construction of bat boxes. The Barn Owl Trust has published advice on providing for barn owls in new development, conversions and restorations.

CASE STUDY 16.



Grassland habitat relocated at Bellsquarry

In West Lothian, about 500m² of a rare grassland habitat have been moved, one turf at a time, from a Livingston housing site to a carefully selected location on the edge of nearby Bellsquarry Wood. Although the development site was not protected by any natural heritage designation, it was an attractive wildflower meadow supporting species such as common spotted orchid.

A survey carried out prior to the determination of the planning application established that the site was an area of unimproved neutral grassland, a habitat now rare in West Lothian. Translocation of the habitat was therefore made a condition of planning permission. The relocated grassland, which has been established on land owned and managed by the Woodland Trust, will be carefully monitored for a number of years.

As well as having an important role in the maintenance of local biodiversity, the grassland habitat will contribute to the amenity of the residents of the new housing development.



Common spotted orchid

CASE STUDY 17.

Swift solutions at Culzean, the Gallowgate and Stanley Mills

At Culzean Castle in Ayrshire, restoration of the masonry resulted in the filling of a lot of the nooks and crannies which had previously been used as nesting sites by swifts. The National Trust for Scotland has responded by installing purpose-built swift boxes adjacent to the former nest holes. As the castle is an A-listed building, the project involved close consultation with Historic Scotland which has subsequently issued its own advice to architects on swift conservation.

Specific policies in relation to swifts have been adopted by Glasgow, Edinburgh and North Lanarkshire Councils. In 1997, the City of Glasgow Council made history by agreeing to install swift boxes as part of a housing improvement scheme in Ruchazie. At a housing renewal scheme in Glasgow's Gallowgate, swift nest boxes are being incorporated into the roof space. As part of the restoration of the A-listed Stanley Mills complex in Perthshire, gaps and small holes have been left in the top level of stonework in order to preserve access for swifts.

Concern for Swifts (Scotland) can provide design advice on making provision for swifts in building restoration and new development.



Swift box, Culzean Castle

CASE STUDY 18.

Whooper swans protected at Inchinnan Business Park

Inchinnan in Renfrewshire is identified as a strategic industrial location in the Strathclyde Structure Plan and has developed as a successful business park close to Glasgow Airport. However, the Black Cart Water and surrounding agricultural land at Inchinnan are an important winter feeding and roosting area for an internationally important flock of whooper swans, a species protected under the European Birds Directive. As part of an assessment of the environmental impacts of expanding Inchinnan Business Park, Renfrewshire Enterprise therefore commissioned Land Use Consultants (LUC) and the Wildfowl and Wetlands Trust to undertake a study and make recommendations on the measures required to safeguard the swans and minimise or mitigate any adverse impacts upon their habitat.

The area has been designated as an SSSI in recognition of its European importance for nature conservation. Consideration of the development issues was progressed in tandem with the designation process and involved close co-operation between Renfrewshire Council, SNH and the local enterprise company. Planning permission for the extension was granted subject to conditions requiring:

- that development be pulled back from the river to allow the retention and enhancement of the areas of riverside pasture which are important for the swans;
- the conclusion of an agreement between the developer and SNH providing for appropriate habitat management; and
- careful monitoring of the impact of the development on the swan population.

The masterplan prepared for the business park includes provision for:

- the creation of a new area of habitat to compensate for the area lost to development;
- design measures to minimise disturbance to the swans; and
- the restriction of public access between October and April.



Inchinnan Business Park and Whooper Swans

DEVELOPMENT CONTROL

74. The potential for conflict between development and natural heritage interests can be much reduced where developers discuss their outline proposals with the planning authority at an early stage. Once detailed designs have been prepared and finance lined up, modifications to accommodate natural heritage interests become more difficult and expensive to achieve. It is therefore in the interest of developers, as part of their pre-application research, to undertake an initial assessment of the natural heritage resources of the area which they are proposing to develop. Where nationally and internationally important interests are known or thought likely to exist, it will be important to involve SNH in early discussions. Pre-application discussions with other statutory agencies and the voluntary conservation bodies may also be of value.

75. It is essential that the planning authority is fully informed about the nature and significance of the natural heritage issues raised by development proposals. Beyond the statutory requirement to consult SNH on proposals which might affect natural heritage designations of national importance, authorities are encouraged to consult with relevant conservation and community interests as appropriate to the proposal being considered.

76. Much can be achieved through good will where there is early discussion and a positive relationship between planning authority and developer. Measures which enhance natural heritage value can often be incorporated into developments at modest cost and can offer significant benefits to the developer in terms of positive publicity, marketing and amenity.

Environmental Impact Assessment

77. Environmental Impact Assessment (EIA) is a process which identifies the environmental effects of development proposals and seeks to prevent, reduce and offset any adverse effects. As part of the process, applicants prepare environmental statements containing information on the potential effects and the mitigation measures proposed. Planning authorities can do much to ensure that environmental statements are of a high quality by working closely with both the applicant's consultants and statutory consultees - including SNH - throughout the assessment process. Where it is concluded that EIA is necessary, it is important to:

- ensure that natural heritage issues are identified at an early stage;
- establish appropriate consultation arrangements;
- determine the scope of the assessment in a systematic manner; and
- agree baseline survey requirements, methods and evaluation criteria with relevant bodies, including non-governmental organisations where they have relevant expertise.

78. The requirements for EIA are set out in the Environmental Impact Assessment (Scotland) Regulations 1999. SEDD Circular 15/1999 gives guidance on the application of the Regulations, and the Planning Advice Note on Environmental Impact Assessment (PAN 58) gives advice on best practice in the preparation and scrutiny of environmental statements. Advice for developers and planning authorities on assessing ecological and landscape resources has been published by the Institute of Environmental Assessment. 15, 16

A development control checklist

Once the planning authority has sufficient information, a development control checklist can be a useful means of ensuring that decision-making in relation to the natural heritage is approached in a structured and consistent way. When considering development proposals, it is good practice for the authority to try to determine:

- whether or not there is a natural heritage interest and, if so, what that interest is;
- what effects - positive as well as negative - the development would be likely to have on natural heritage;
- the significance of these effects in relation to development plan objectives for the natural heritage of the area affected;
- if the development is potentially damaging, whether it can be made acceptable by the use of planning conditions and/or agreements; and
- the opportunities to enhance natural heritage which the development might offer.

Conditions and Agreements

79. NPPG 14 provides guidance on the use of conditions and legal agreements to prevent, minimise or mitigate adverse affects on the natural heritage. Conditions and agreements can also deliver positive natural heritage benefits. Over the last five years, conditions have been used in Scotland to secure a range of positive actions, such as.:

- special measures for protected species (eg. barn owls, otters, great crested newts);
- habitat creation and enhancement (eg. Birnie and Gaddon Lochs);

- the submission of landscape and habitat management plans (eg. Inchinnan Business Park); and
- provision for education, interpretation and enjoyment (eg. Gartcosh Industrial Park).

The Addendum to SODD Circular 4/1998 includes model conditions for safeguarding species and the provision of footpath links.

CASE STUDY 19.

New rock exposures created at Benbeoch

Benbeoch in East Ayrshire is an earth science SSSI, of international importance as the location where kyllite, an igneous rock akin to basalt, was first recorded. The kyllite forms a sill intrusion, a once molten mass of rock that was squeezed between the rock layers of the area around 290 million years ago. Revealed after millions of years of erosion, the sill is an important scientific and educational resource, yielding information on the origin of the kyllite rock type and of volcanic activity in the Midland Valley as a whole.

In 1995, Scottish Coal Ltd submitted a proposal to extract coal from within the SSSI, which would entail excavation into a portion of the kyllite sill, in order to more fully exploit the reserves. SNH did not oppose the development, as it offered scope for the enhancement of the scientific value of the site by providing new rock exposures. Conditions were imposed requiring that, after mining, a stable rock face illustrating the sill would be left exposed, with easy access; and that access to the sill would be maintained during excavation.

This case is a good example of well-planned mineral extraction enhancing the Earth science interest of a site. Scottish Coal was willing to leave new faces when backfilling rather than restoring the workings to the original contour of the site. A substantial length of the sill was left exposed, providing a rock face that is representative of the scientific interest of the site as a whole.



80. Planning agreements can also be used to secure natural heritage benefits. Benefits which have been secured under planning agreements in Scotland include:

- provision for appropriate land management (eg. Beinn Ghlas Windfarm);
- habitat creation and enhancement (eg. Lowland Crofting, West Lothian);

- the translocation of species or habitats (eg. Bellsquarry grassland);
- provision for remediation, after-care and monitoring (eg. Airdsgreen, Muirkirk); and
- provision for recreational use and countryside access (eg. Gartcosh Industrial Park).

The above examples demonstrate that development and the conservation and enhancement of our natural heritage can and do work together.

81. In the Central Scotland Forest and other areas where the expansion of woodland cover is an objective, planning agreements can be used to secure additional woodland cover as an integral part of development and regeneration schemes.

82. SODD Circular 4/1998 sets out Government policy on the use of conditions in planning permissions. Supplementary advice on the drafting of conditions is contained in the addendum to that circular. Further guidance on planning agreements is contained in SODD Circular 12/1996.

CASE STUDY 20.



Safeguarding eagles by Agreement

In granting permission for a windfarm development at Beinn Ghlas, near Taynuilt, Argyll and Bute Council imposed a condition requiring that construction be timed to avoid the breeding season of the resident golden eagle population. Further measures which seek to ensure that the windfarm development does not adversely affect the eagles have been secured under a planning agreement.

Under the agreement, National Wind Power has appointed an eagle specialist to provide expert advice and is implementing habitat improvement and management schemes designed to favour eagle prey species. Public access to the area is being managed to minimise disturbance to the eagles and their use of the area is being carefully monitored.

Conclusion

This Planning Advice Note aims to promote good practice in planning for natural heritage and demonstrate that planning and the development process can be powerful tools for realising natural heritage objectives and creating quality environments for living and working. It encourages planning authorities and developers to be positive and imaginative in developing policies and preparing proposals for development. Planning for

a diverse range of wildlife and habitats, the maintenance and enhancement of landscape character and earth heritage interest, the development of greenspace networks and the provision of opportunities for developing understanding and enjoyment of the natural world are all essential elements of this approach.

NOTE

Enquiries about the contents of this Planning Advice Note should be addressed to Dr. Graeme Purves, Planning Services, Scottish Executive Development Department, 2-H91 Victoria Quay, Edinburgh EH6 6QQ (0131 244 7533) or by e-mail to graeme.purves@scotland.gov.uk.

Further copies may be obtained by telephoning 0131 244 7538.

Summary

While the planning system has a key role to play in safeguarding landscape and wildlife, development and land use planning also offer many opportunities to further enhance Scotland's natural heritage and create high quality environments for living and working.

Planning can help to secure development which complements the natural environment and works with the grain of natural processes.

A robust and effective planning policy framework for natural heritage depends upon:

- well focused and up-to-date development plans;
- partnership and community participation;
- a good understanding of the natural heritage resource;
- clear objectives and targets in relation to landscape, biodiversity and earth heritage; and
- a commitment to monitoring and review.

Landscape Character Assessment, Biodiversity Action Plans and local biological record centres have valuable roles to play in informing the planning process.

Networks of quality greenspace are an effective means of providing:

- a strategic landscape framework for urban development;
- valuable wildlife habitats and increased biodiversity;
- accessible opportunities for recreation and enjoyment of the natural world; and
- opportunities for communities to participate in the management of the local environment.

The restoration of derelict land and mineral sites can offer valuable opportunities to improve landscapes and enhance biodiversity.

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