

3.2 Planning, Development and Infrastructure Dealbhadh, Leasachadh agus Bun-structair

Objective: To take biodiversity into account during building and maintenance works.

Amas: Luchd-dealbhadh, luchd-leasachaidh agus luchd-stiùiridh fearainn a chuideachadh gus aire a ghabhail do bhith-iomadachd rè obair togail is càraidh.

Background

Cùl-fhiosrachadh

The challenge of accommodating biodiversity in the construction and maintenance of roads, and in the selection and management of new developments, was identified in the 2006 and 2010 Highland BAPs as an issue to be addressed.

A sound strategic approach to reducing habitat fragmentation in development planning is suggested. However, the priority marine and terrestrial habitats are not mapped, there is a lack of biological information on which to base planning decisions, and there is very limited ecological input to planning casework outwith designated sites in Highland.



Opportunities

Cothroman

Highland-wide Local Development Plan:

The Highland-wide Local Development Plan (HwLDP) encourages a positive and holistic approach to biodiversity by asking developers to address all species and habitats issues arising from the development across their sites and in adjoining areas.

This Plan is currently being reviewed, and it is hoped that the new Plan (HwLDP2) will build on this by encouraging developers to enhance biodiversity where possible.

River Basin Management Plans:

The River Basin Management Planning process presents opportunities for an efficient joined-up approach to issues ranging from flooding to carbon sequestration if it is intimately linked to local planning.

Green Networks: Scottish Planning Policy states that the planning system should protect, enhance and promote green infrastructure, including open space and green networks¹.

¹ See

<http://www.scotland.gov.uk/Resource/0045/00453827.pdf>

Inverness is set to expand over the next 25 years including along the “A96 Corridor”, which stretches eastwards from Inverness to Nairn. A Green Network has been proposed to help promote greenspace linkages and to safeguard and enhance wildlife corridors in and around new and existing developments. This is in line with Policy 74 of the HwLDP, and will maximise the gain for the environment stemming from A96 Corridor development.



Green Infrastructure Programme: SNH is leading on a Green Infrastructure Programme, which forms part of Scotland’s programme for European and Structural Investment Funds 2014-2020.

The following activities will be funded through the Programme:

- greening cities (e.g. sustainable urban drainage schemes, investing in public parks and local nature reserves, restoration of urban water courses, natural flood management);
- green recreation and health (e.g. green exercise projects including green gyms, health walks, path networks on urban rivers, canals and loch corridors);
- access to nature (e.g. increasing access for all to green infrastructure particularly through improving greenspaces in areas of multiple deprivation);

- green corridors (e.g. creating wildlife corridors through joining up green sites within and around Scotland’s cities);
- vacant and derelict land (e.g. improving safe access to vacant land, transforming vacant and derelict land into functional green space); and
- community growing (e.g. creating new allotments, orchards, community gardens).

Planning System: Scottish Planning Policy states that the planning system should conserve and enhance protected sites and species, take account of the need to maintain healthy ecosystems, and work with the natural processes which provide important services to communities.

Further, it requires that the planning system seek benefits for biodiversity from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats, as well as support opportunities for enjoying and learning about the natural environment.



SuDS: Sustainable Drainage Systems (SuDS) are a sequence of water management practices and facilities designed to drain surface water more sustainably than discharging through a pipe to a watercourse. They frequently involve filter strips, wetlands and ponds, and these could be

designed and sited to maximise their benefit to wildlife and residents.

Mitigation: This is the process that tries to ensure that any impacts on biodiversity from development are avoided or compensated for onsite.

Biodiversity offsetting: Biodiversity offsets are conservation activities that are designed to give biodiversity benefits to compensate for losses - ensuring that when a development damages nature (and this damage cannot be avoided) new, bigger or better nature sites will be created. They are different from other types of ecological compensation as they need to show measurable outcomes that are sustained over time.

This is a relatively new concept and there are concerns about it, but it is inevitable that some damaging schemes will be

politically unstoppable and if some biodiversity benefit can be retrieved then the Highland Environment Forum partners think it should be sought. Work is needed to investigate and agree the best way to do this in Highland.



The issues, updates, project ideas and case studies for Development and Infrastructure have been grouped under the following two sub-headings:

Roads and Public Spaces
Planning and Development

Roads and Public Spaces

Rathaidean agus Àrainnean Poblach

Issues

Cùisean

The Highland Council has safety requirements to fulfil in relation to the management of its road verges e.g. to ensure visibility at road junctions and bends and the visibility of traffic signs.

The Council also has a duty to “further and promote the conservation of biodiversity in its day-to-day work”. Part of this can be achieved by enhancing the richness of the land it manages for nature, including road verges which are often good sites for wildflowers and invertebrates.



Cutting flowers after they have seeded gives them a better chance of surviving and flourishing. This, in turn, benefits insect populations, in particular, declining numbers of bumblebees.

Hedges are an important habitat in many areas which, if managed properly, provide great biodiversity benefit. However, removal of trees and annual cutting with flail mowers damages hedges, particularly when the cutting is undertaken early in the season.

Update

Cunntas às Ùr

Caithness Road Verges Trial Project: The Caithness Biodiversity Group and Council staff trialled a Road Verges project to identify and manage road verges for wildlife (see case study).

Highland Road Verges Project: Following the success of the Caithness trial project in 2011 and 2012, The Highland Council and Transport Scotland agreed to extend this verge management policy to other selected sites in the Council area. In Autumn 2012 a public appeal for flower-rich road verge locations was launched, and nearly 30 were put forward.



Wildflower Verges Operators' Manual: In 2013 the Council issued a manual to aid and advise the tractor drivers responsible for

cutting verges so that they can identify sections of verge rich in wildflowers and manage their cutting schedule to maintain and enhance wildflower populations.

In addition, Council Rangers and Biodiversity Officers have provided training to grounds maintenance staff on an ad hoc basis. However, many of the verges are cut by contractors, which presents a challenge to consistency of approach and the ability to provide appropriate training.

In late 2014, the Council agreed to reduce verge mowing in rural areas (outwith 30mph restrictions).



Tree Strategy: The Highland Council is working on a Tree Strategy, which will encourage proactive management of Council owned and managed trees as well as improving the existing tree cover to conserve and enhance the quality, role and diversity of the trees and woodlands within Highland's urban and rural environment.

Case Study

Sgrùdadh Cùise

Caithness Road Verges Project

Pròiseact Fàil-rathaid Ghallaibh

Some volunteers from the Caithness Biodiversity Group have been working with The Highland Council's Community Services (Roads) to identify and manage a series of verges for wildlife.

Caithness has some botanically rich verges whose quality would improve by improving the management and timing of mowing and the removal of cut material. Improved management also benefits nectar feeding insects, particularly bees and butterflies, and flowering plants such as orchids, eyebrights and vetches.

The great yellow bumble bee is a nationally rare species and Caithness holds an important population along with the Northern Isles, Sutherland and the Hebrides. Its food plants (knapweed, red clover and kidney vetch) are found on verges, and since survey work began, the Group have found great yellows on several nectar-rich verges. However, mistimed verge cutting can destroy this foraging area, depriving this and other bee species of important food.

The Project began in 2011 with a one-year trial. 13 verges were selected following advice from the County Plant Recorder and Bumblebee Conservation Trust.

A cutting regime was agreed, which took into account the different verges

requirements and safety considerations. The Council and its contractors cut the verges, and they were monitored by volunteers from the Group. Signs were erected to make the verges more visible to contractors and help explain the management to the public.

Removing the cuttings makes for the best way of management but as yet the Project partners have not worked out a viable way of carrying this out.



The Project found that awareness-raising is a big challenge. There were concerns from some members of the public who prefer tidy verges, and people walking on the roads prefer short vegetation. Some verges were cut by local people who weren't aware of the project. However, despite these initial concerns, the Trial was generally well received and the Project has continued annually since then.

Future Action

Gnìomh san Àm ri Teachd

15. Manage Road Verges for Wildlife

Cùm Rian air Fàil-rathaid airson Fiadh-bheatha

Rationale: Road verges provide a valuable habitat for wildflowers, invertebrates and other wildlife, if the flowers are allowed to set seeds.

A project was trialled in Caithness, guidance has been produced, and the Council is reducing verge mowing in rural areas, but there is a need for ongoing work to identify problem areas and tackle invasive weeds.

Project Proposals

- 15.1** Liaise with and train Council, BEAR Scotland and contractors' staff in appropriate verge management for wildlife, and raise awareness of the benefits of 'untidy' verges in the countryside amongst the general public.
- 15.2** Identify the best verges throughout Highland, monitor the impact of the new cutting regime on the vegetation, and feed the results back to roads staff within the Council and BEAR Scotland.
- 15.3** Raise awareness of the wildlife benefit of hedges and encourage better management through cutting once every three years, encouraging the growth of mature trees within hedges, replanting and filling in gaps and cutting in late autumn. Encourage the creation of wood piles rather than shredding whole trees when felled close to roads.

Lead Partner: The Highland Council

Supporting Partners: TS, BEAR, LBGs, P, BBCT

16. Wildflower Creation & Management

Cruthachadh & Rianachd Faichean Fhlùraichean-fiadhaich

Rationale: There is interest in creating wildflower meadows as an alternative to mown grass in public spaces.

Project Proposals

- 16.1** Run a training course for Council grounds staff and community groups wishing to create and manage wildflower meadows, perhaps linking in with land management courses and a demonstration site. Council Rangers would be ideally placed to deliver this project.

Lead Partner: The Highland Council

Supporting Partners: UHI, SNH, NTS, BBCT, FL, SS, P

Planning and Development

Dealbhadh agus Leasachadh

Issues

Cùisean

At present the level of ecological advice provided to planning officers dealing with planning casework outwith designated sites in Highland is limited.

Scottish Natural Heritage provides advice on designated sites and European Protected Species. The Highland Council does not employ any ecological advisors. There is also a lack of ecological information on which to base decisions (see Chapter 3.6).



There is considerable pressure for new roads and developments, especially close to Inverness. For example, the Inner Moray Firth Proposed Local Development Plan earmarks land for over 15,000 new houses by 2021 and a further 10,000 by 2031. How do we accommodate these new houses, with the associated roads and infrastructure, without significant habitat loss?

The pressure to ameliorate the consequences of climate change by investing in renewable technologies such as onshore wind farms, micro-hydro schemes and future large offshore developments has

been an increasing source of conflict in the Highlands.



For example, wind farms and associated tracks can disturb upland habitats and birds, while small hydro schemes can damage the ecology of streams and associated habitats. This is particularly the case where there is a cumulative impact from many developments.

It is difficult to evaluate whether the long-term effect of these developments in mitigating climate change will offset their more immediate impacts on biodiversity.

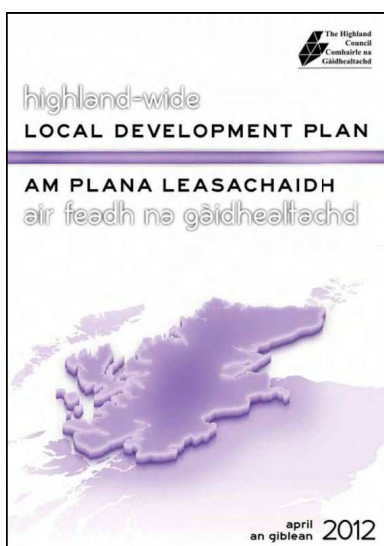
We do not yet know what impacts marine renewables will have, it is possible that offshore wind installations will improve biodiversity in the long term through effectively creating artificial reefs and through localised trawling restrictions.

The Green Networks would seem obvious locations for local offsetting. It is hoped that improved biodiversity input to local plans, developing green networks and, in time, biodiversity offsetting will address development pressures on wildlife in expanding areas.

Update

Cunntas às Ùr

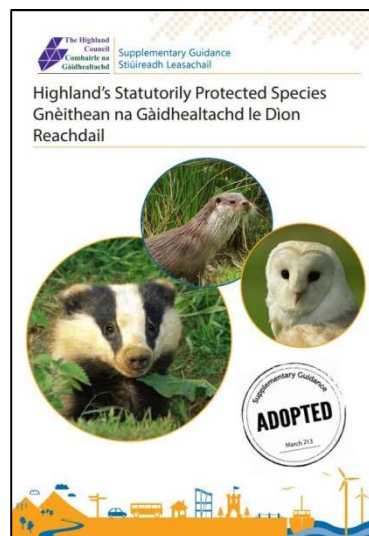
HwLDP & HwLDP2: The current Highland-wide Local Development Plan (HwLDP) encourages a positive and holistic approach to biodiversity by asking developers to address all species and habitats issues arising from the development across their sites and in adjoining areas.



This Plan is being reviewed, and biodiversity is one of the topics that will be covered. The Main Issues Report for the Highland-wide Local Development Plan 2 (HwLDP2) will be out for consultation in autumn 2015. Scottish Natural Heritage, Scottish Environment Protection Agency and others have been working with Council planners to ensure that wildlife concerns are addressed, and all Highland Environment Forum partners will have the opportunity to feed in their views during the consultation.

SEA: Strategic Environmental Assessment forms a part of the Local Development Plan process. SEA is a key component of sustainable development, establishing important methods for protecting the

environment and extending opportunities for public participation in decision making.



EPS Guidance: Supplementary Planning Guidance was produced on European Protected Species (EPS) in 2011, which was formally adopted into the Highland-wide Local Development Plan in March 2013. This Guidance will be reviewed through the HwLDP2 process.

Training was provided on EPS in 2011 and since then, annual training has been provided to the Council planners on a range of wildlife-related subjects.

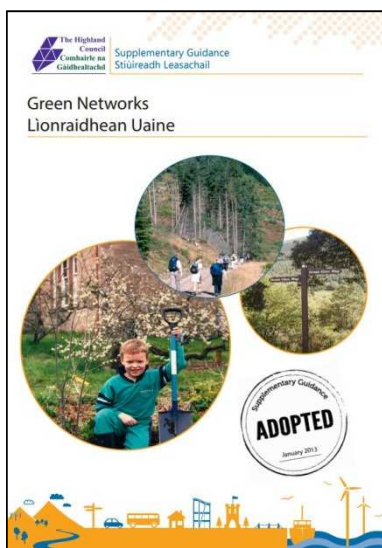


Green Networks: There was considerable work on Green Networks to prepare the Supplementary Guidance to accompany the HwLDP. This included spatial mapping for

the Inverness to Nairn area, including key habitat corridors.

Easter Ross, the Dornoch-Helmsdale corridor, the Thurso-Wick corridor, Fort William and Portree have been identified as the next key areas for green networks. These will be taken forward in the Inner Moray Firth, Caithness & Sutherland, and West Highland and Islands Local Development Plans (LDPs).

Safeguarded greenspaces are shown within the larger settlements for the Inner Moray Firth LDP area. The Caithness and Sutherland LDP will show mapped green networks for the larger settlements, as will the West Highland and Islands LDP.



The Council has statutorily adopted guidance on Green Networks including detailed mapping for the A96 Corridor. This guidance is ready to be applied by application case officers in negotiating with landowners and developers on a case by case basis.

SNH encourages developers to incorporate green networks when they first start

planning their developments, and has guidance on its website.^{2 3}

Species Champions: In early 2014 Highland Councillors were given the opportunity to become Species Champions, and to date 22 Councillors have signed up to promote a UK priority species across Highland.

EIAs: All large planning applications have to complete an Environmental Impact Assessment (EIA), which identifies potential biodiversity impacts from the development. If the mitigation proposed does not address the issue then the application will be refused.

In some instances planning conditions or legal agreements have been placed on the development whereby nearby land is managed for the benefit of species that may be adversely affected.

SNH provides an online map of important watercourses to guide sustainable hydro-development away from the richest and most sensitive areas. This information feeds into the planning process via SEPA's management of CAR licences and SNH advice. This work aims to identify and protect watercourses in western Scotland that are of national and international importance for their water-loving oceanic moss and liverwort communities.⁴

² <http://www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/greenspace-and-outdoor-access/>

³ <http://www.snh.gov.uk/planning-and-development/approach/snh-devt-planning/>

⁴ <http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=1953>

Case Study

Sgrùdadh Cùise

Monadhliath Eagle Project

Pròiseact Iolaire a' Mhonaidh Lèith

In February 2014, SSE commissioned Haworth Conservation Limited to produce a Regional Eagle Conservation Management Plan (RECMP), as part of the Nature Conservation Management Plan for Dunmaglass wind farm.

The RECMP was introduced in accordance with a Section 75 Agreement under the Town & Country Planning (Scotland) Act 1997 (as amended). SSE also committed to funding provision and management assistance within Natural Heritage Zone (NHZ) 10, to enhance the conservation of breeding golden eagles.

The RECMP aims to review the current status of the golden eagle population breeding in NHZ10, to provide an accurate reflection of the most important factors influencing the population in this landscape and, where possible, to undertake practical conservation management actions to enhance the golden eagle population by increasing its size and productivity.

A dedicated Golden Eagle Project Officer was appointed in February 2015 to

implement the RECMP, employed by Natural Research Limited and fully funded by SSE. Their work will be guided by an Advisory Group. The first three years will focus on surveys, satellite tagging and analysis, the results of which will inform the scope of future work.

This is a 25 year project, which is funded by SSE. As the project progresses, it is expected that further developer contributions will be made to support the RECMP and to employ a second Golden Eagle Project Officer who will assist with the primary objectives on monitoring and enhancing the golden eagle population within NHZ 10 as well as helping to raise awareness of golden eagle conservation and management in schools and amongst the general public.



Future Action

Gnìomh san Àm ri Teachd

17. Improve Ecological Input to the Planning Process (including Green Networks and Biodiversity Offsetting)

Leasaich Cur-a-steach Eag-eòlasach dhan Pròiseas Dealbhaidh (a' gabhail a-steach Lìonraidhean Uaine agus Cothromachadh Bith-iomadachd)

Rationale: At present the level of ecological advice provided to planning officers dealing with planning casework outwith designated sites in Highland is limited.

There was considerable work on Green Networks to prepare Supplementary Guidance to the Highland wide Local Development Plan, but further work is needed to turn this into a reality on the ground.

Biodiversity offsetting requires land where habitat creation or management can offset the loss of biodiversity on a development site. Some Local Authorities are developing this approach and some renewables developments are offsetting on nearby sites, but there is currently no agreement or mechanism for biodiversity offsetting in Highland.

Project Proposals

- 17.1** Ensure that the new Highland-wide Local Development Plan (HwLDP2) and Area Local Development Plans provide a strong steer for ecological issues and maximise opportunities for maintaining biodiversity through development.
- 17.2** Make sure that the principles contained within the Supplementary Guidance are included in the development briefs, and develop green networks within the larger settlements and in the A96 corridor and Inner Moray Firth through the planning process.
- 17.3** Identify a mechanism for biodiversity offsetting in Highland. If a suitable mechanism can be agreed, identify potential sites and habitat improvements, and undertake a Highland pilot project.
- 17.4** Provide a mentoring service for a short time to allow Council planning officers and members to build confidence in their responses by e.g. attending roost visits with a bat worker.

Lead Partner: The Highland Council

Supporting Partners: SNH, RSPB, SWT, BBCT, LBGs, other HEF partners, developers

18. Maximise the Wildlife Value of SuDS Ponds

Barraich Luach Fiadh-bheatha Lochain SuDS

Rationale: Sustainable Drainage Systems are a sequence of water management practices and facilities designed to drain surface water more sustainably. They often involve ponds, and these could have higher biodiversity value.

Project Proposals

18.1 Employ an officer through the graduate internship programme within The Highland Council to assess SuDS ponds in the A96 corridor as part of the Green Network, create local best practice guidance, and see how future ponds in developments can be designed and sited to maximise their benefit to wildlife and residents.

Lead Partner: The Highland Council

Supporting Partners: SNH, SEPA

19. Secure Greater Biodiversity Input from Renewable Installations

Dleas Barrachd Cur-a-steach Bith-iomadachd bho Ionadan So-ùrachaidh

Rationale: A number of wind farms have been granted planning permission in the Monadhliaths, as well as elsewhere in Highland, resulting in increased pressures on eagles and other species of birds.

Project Proposals

19.1 Employ a Golden Eagle Officer to survey and monitor eagle populations, work with land managers and help raise awareness of eagle issues in the Monadhliaths.

19.2 As further windfarm applications go through the planning process, encourage other developers to contribute to this work and establish similar projects elsewhere in Highland.

19.3 Bring together monitoring data from offshore developments in a single database (ideally with the Oil Industry data) to give a big picture of ecological changes in the North Sea.

Lead Partner: SSE (19.1), The Highland Council (19.2), Moray Firth Partnership (19.3)

Supporting Partners: NR (19.1), THC, SNH, RSPB, RSG, DIGG, Estates & developers (19.2), Renewable & Oil Industry Sector (19.3)