The Benefits of B-Lines to Local Authorities in Scotland





What are B-Lines?

B-Lines are 3 km wide linear pathways, "insect super-highways" composed of stepping stones of flower-rich habitats which link together existing important flower-rich areas (e.g. Sites of Special Scientific Interest (SSSIs), local wildlife sites, Local Nature Reserves, Local Nature Conservation Sites, nature reserves and Priority Habitats). They have been mapped on a county by county basis through a process of data collation, connectivity analysis and workshops with local stakeholders. Within B-Lines, together with partners and individuals, we are creating additional flower-rich stepping stones, big and small, to help pollinators and other insects travel safely through our landscapes.

B-Lines is a landscape-scale biodiversity initiative, developed and mapped by Buglife across the UK in partnership with local nature partnerships, statutory agencies, local authorities, non-governmental organisations (NGOs) and other conservation partners. B-Lines is creating a UK-wide network of flower-rich habitats in line with commitments made in the Lawson review 2010 "Making Space for Nature"; identifying and creating linkages between flower-rich habitats. B-Lines is a landscape-scale framework within which we can all make a major contribution towards the Pollinator Strategy for Scotland (2017-2027) and the Scottish Biodiversity Strategy.

NatureScot's "Framework for Nature Networks" recognises B-Lines as an existing initiative that will help deliver Nature Networks across Scotland to achieve greater connectivity of habitats to address the biodiversity crisis.



UK B-Lines network. Interactive map accessible at buglife.org.uk



Angus Council cut and lift verge management © Rachel Richards



Boness, John Muir Way B-Line © Scottish Rewilding Alliance

Local authorities are a key part of delivering B-Lines

Here are 6 actions for local authorities to support B-Lines and help local pollinator populations:

- 1 Check the B-Lines map to see where they run through your local authority, and prioritise wildflower habitat enhancement and creation work within the B-Lines network where possible.
- **Ensure that local wildlife sites and nature reserves** in B-Lines are being well managed to maintain a favorable condition of habitats and species.
- Review the management of green infrastructure to create more wildflower-rich, pollinator friendly natural habitats of value to both wildlife and local residents.
- 4 Create flower-rich areas in public greenspaces such as parks, school grounds, roundabouts, car parks, etc.
- **Encourage and support local people** to manage gardens and community greenspaces to benefit pollinators and other wildlife as well as the local community.
- 6 Create and adopt a Pollinator Strategy within your local authority.

How can you use B-Lines and how can they help you?

Local authorities have a duty to further the conservation of biodiversity in exercising their functions under the Nature Conservation (Scotland) Act 2004, which has been strengthened by The Wildlife and Natural Environment (Scotland) Act 2011.

Supporting and helping to deliver B-Lines will help local authorities' meet their commitments to biodiversity, whilst also contributing toward delivery of key objectives outlined in the Pollinator Strategy for Scotland. B-Lines provides a very simple framework within which local authorities can deliver their obligations; benefiting both wildlife and local communities.

B-Lines maps can assist in prioritising and delivering Green Infrastructure and other wildlife initiatives, in targeting action on your own estates and in strategic development planning work. This will also help local authorities to deliver upon the Planning (Scotland) Act 2019, and The National Planning Framework 4, which sets out the requirements for development to enhance biodiversity.

Using the B-Lines in strategic planning and green infrastructure work

Local authorities can use B-Lines as part of the biodiversity 'evidence base' to support biodiversity and Green Infrastructure mapping by including B-Lines in the mapping of habitat and landscape connectivity. This will help to ensure that pollinators are properly considered in emerging Local Development Plans. B-Lines can also help to drive the creation and restoration of individual Priority Habitat types and action plans for local species priorities. B-Lines is a simple yet effective approach to green infrastructure, which is highly attractive to local communities and simple to understand. Local authorities should identify synergies between B-Lines and existing green infrastructure mapping, and then use the B-Lines messages to promote and take forward action on the ground.



Six-spot Burnet Moth (*Zygaena filipendulae*) © Claire Pumfrey



Devils-bit Scabious (Succisa pratensis), Linn Park © Suzanne Burgess

Supporting local planning

It is important that wildlife habitat is properly considered within all planning decisions, including the potential impacts on the connectivity of flower-rich habitats. Although not a statutory consideration, B-Lines can help to identify where important wildflower networks exist within the landscape. The Mitigation Hierarchy (avoid, mitigate, and as a last resort compensate) should always be strictly adhered to in planning decisions to help protect flower-rich habitats. B-Lines can inform Local Development Plan production and Local Biodiversity Action Plans.

B-Lines are also a useful lever to encourage developers to make their green spaces truly multi-functional and to deliver for pollinators, rather than creating traditional species-poor amenity grassland areas. Flower-rich habitats can support local place making and can be focal points for community activity in well planned developments.

They are also an ideal mechanism for prioritising wildflower delivery in B-Lines as a Nature Positive outcome as part of future Biodiversity Net Gain (BNG) plans should it become adopted in Scotland. B-Lines are a prioritised and connected landscape so should be considered a local biodiversity priority.

Supporting improved land management

Local authorities can make a significant contribution by implementing positive management regimes on any flower-rich habitats and local wildlife sites which form a key part of the B-Lines network. Many local authorities have significant land holdings, which have the potential to be managed more sympathetically for wildlife. Small changes to management regimes, such as reducing cuts and removing cuttings, carried out on roadside verges, parks and other amenity space can have a huge impact on the value of land to insect pollinators and other wildlife, and added together can make a major contribution towards the enhancement of the environment at a landscape-scale. By creating more

accessible, natural greenspace, B-Lines will bring nature into more people's lives, with benefits to both physical and mental wellbeing.

Guiding habitat restoration ambitions

Restoring pollinator populations within B-Lines will depend on a large number of habitat restoration and creation projects being implemented across the UK. If local authorities focus their habitat restoration ambitions within the B-Lines network, the biodiversity benefits of their actions can be increased. B-Lines can be a useful driver of both local support and funding for habitat restoration objectives.

Enthusing and educating others to take action

Significant parts of the B-Lines network can be developed by enthusiastic individuals and groups often just taking action on small areas of land. Schools, businesses, local communities and private individuals can all help to develop the flower-rich habitats needed within B-Lines. We would encourage local authorities to use B-Lines to enthuse and work with local people to help conserve our insect pollinators and other wildlife.



Bumblebee (Bombus sp.) © Claire Pumfrey



Bog Hoverfly (Sericomyia silentis) © Liam Olds



Speedwell Longhorn (Cauchas fibulella) © Lucia Chmurova

Legislation & policy background

Scotland's Biodiversity Strategic Framework

Scotland's Biodiversity Strategic Framework is designed to guide efforts to protect and enhance biodiversity across the country. It aligns national efforts with global biodiversity goals and outlines actions to preserve ecosystems, restore habitats, and promote species conservation.

The biodiversity strategic framework includes a Biodiversity Strategy setting a long-term ambition and vision for what good looks like for biodiversity in Scotland, and a Natural Environment Bill to establish the framework for statutory targets to restore and protect nature (expected to be published in the 2024-2025 Parliamentary year).

Scottish Biodiversity Strategy

The Scottish Biodiversity Strategy (SBS) sets out Scotland's approach to conserving biodiversity and restoring ecosystems reflecting Scotland's international obligations under the Convention of Biological Diversity.

The strategy outlines the commitment to protect at least 30% of land and sea for nature by 2030 (known as 30x30) as well as an aim to create Nature Networks across landscapes to underpin the resilience and health of species and habitats.

B-Lines can play a key role in meeting these targets by restoring land for nature, and restoring connectivity to habitats and helping local authorities to contribute to the national effort to reverse biodiversity declines. Targeted restoration of habitats within B-Lines for pollinators can help to encourage resilient populations. B-Lines can also play a key role in generating support and co-ordinating habitat restoration work across sectors.

Nature Conservation (Scotland) Act 2004

Under the Nature Conservation (Scotland) Act 2004, all public bodies in Scotland are required to further the conservation of biodiversity when carrying out their responsibilities. This applies not just to protected sites and species but imposes a biodiversity duty to help Scotland meet its national and international biodiversity targets, address biodiversity loss and contribute to nature's recovery. The Wildlife and Natural Environment (Scotland) Act 2011 requires public bodies in Scotland to provide a publicly available report every three years, on the actions which they have taken to meet this biodiversity duty. B-Lines can help to target and prioritise wildflower delivery to best connect Priority Habitats and to restore landscape connectivity for pollinators as part of the biodiversity duty.



Corehead Meadow, Borders Forest Trust © Claire Pumfrey



Access to nature provides wellbeing benefits © Lucia Chmurova

The Conservation (Natural Habitats, &c.) Regulations 1994

The Conservation (Natural Habitats, &c.) Regulations 1994, usually known as the Habitats Regulations, has been translated into specific legal obligations in Scotland. The regulations enact the European Union's (EU) Habitats Directive (92/43/EEC) in the UK. Following the UK's exit from the EU, changes in 2019 to the Conservation of Habitats and Species Regulations (2017) transferred functions from the European Commission to the appropriate authorities. The regulations require development plans "to include policies encouraging the management of features of the landscape which are of major importance for wild flora and fauna. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems of marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species."

Planning (Scotland) Act 2019

Local authorities must integrate environmental considerations into land use and planning decisions. Under the act, local authorities must take into account the impacts of development on biodiversity, water resources, and green spaces.

The National Planning Framework 4 (NPF4) sets requirements for development to enhance biodiversity through spatial principles, regional priorities, national developments and national planning policy. Under Policy 3 of NPF4 all development will contribute to the enhancement of biodiversity, including where relevant restoring degraded habitats. Local authorities should also promote nature recovery and nature restoration across the development plan area, including by facilitating the creation of Nature Networks and strengthening connections between them to support improved ecological connectivity; restoring degraded habitats or creating new habitats; and incorporating measures to increase biodiversity, including populations of priority species. This highlights not just the importance of recognised sites of biodiversity importance, but the wildlife corridors and stepping stones that provide

valuable landscape connectivity. As an existing prioritised and connected network B-Lines deliver this. When properly utilised B-lines address habitat loss and fragmentation, and the north-south and east-west connections provide species with a response to pressures, helping them to adapt to the changing landscape and climate.

Climate Change (Scotland) Act 2009

Local authorities are required to contribute to Scotland's legally binding targets of reducing greenhouse gas emissions and adapting to climate change. This includes considering sustainable development and supporting projects that mitigate climate change while conserving biodiversity. The habitats restored and created through B-lines can provide ecosystem services and help mitigate against climate change. When managed well, permanent grasslands act as important carbon sinks, absorb and store water during high precipitation and can help to reduce the impacts of urban heat islands by providing vegetation cover which helps to cool surfaces. Permanent grasslands also require less cutting, therefore reducing the need for regular use of machinery which emit emissions.

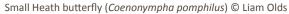
Scottish National Adaptation Plan (SNAP3) 2024-2029

SNAP3 sets out actions for the Scottish Government and partners to address and recognise the urgency of the climate crisis which impacts people's wellbeing and the wellbeing of the planet. The mapped B-lines cover a mosaic of habitats travelling through rural and urban areas.

'Nature connects across our land, settlements, coasts and seas. Forests, grasslands, waters and other natural spaces create a rich network where plants and animals forage, feed and move as the climate changes. This network supports biodiversity and provides shelter from extreme weather and changing conditions.'

The habitats created and restored within B-lines not only provide vital habitat for wildlife, but they can also provide essential ecosystem services and resilience to the impacts of climate change.







Common Furrow-bee (Lasioglossum calceatum) © Liam Olds

Pollinator Strategy for Scotland

The Pollinator Strategy for Scotland (2017-2027) sets out how Scotland can be a place where pollinators thrive, along with actions that are needed to help achieve that objective. The strategy sets out to address the causes of decline in populations, diversity and range of our pollinator species, and to help them thrive into the future. The accompanying Implementation Plan (revised March 2021) develops further the actions required to achieve the five objectives of the strategy. The strategy looks to Government, local authorities and the public sector to lead across many of their work areas and duties, to ensure that improved knowledge of pollinators is used to inform policy and practice, and to develop a strong network of good-quality pollinator habitats to help Scotland's pollinators to thrive.

Local Biodiversity Action Plans

Some local authorities (and National Park Authorities) have Local Biodiversity Action Plans (LBAP) supported by local biodiversity partnerships. A LBAP identifies the habitats and species on which work should focus and are one way in which the Scottish Biodiversity Strategy can be implemented at the local level. B-Lines can help to drive the delivery of Priority Habitat for pollinators and support the recovery of key pollinators through the LBAPs.

References

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Buglife B-Lines map

J. Robins, D. Smith, R. Richards and C. Pumfrey (2025) The Benefits of B-Lines to local authorities in Scotland.