

WHERE TO START

Biodiversity is the variety of life, the rich assembly of living things in the natural world. Biodiversity includes all living things and their environments, from the tiniest flying insect to the tallest tree, from open expanses of coastline to the smallest urban garden. Biodiversity is our key resource and support system, sustaining human existence and our quality of life. Maintaining and enhancing biodiversity is central to the challenge of sustainable development, and every business, organisation and individual has a part to play.

Where to Start

Action for a Business could take a number of different forms:

- On-site action by the Business
- Incorporating Biodiversity into your Environmental Management Systems
- Sponsorship of the Local Biodiversity Action Plan
- Supporting activities in the local community

On-site Action

Use existing skills from within your organisation. Find out what environmental skills and interests your staff has in-house, in terms of bird watching, natural history, ecology, gardening etc.

Examine what Environmental Management Systems could be developed for the practices and procedures that exist in your business.

Carry out a site audit by studying what wildlife habitats and species occur in the grounds associated with your business, or species that use the site from time to time.

Enhance biodiversity by providing habitats for a greater variety of wildlife. For example, plant native trees, hedging, shrubs, wildflowers and bulbs, put up bird and bat boxes, or create a pond.

Empower your staff to develop ideas and implement plans to increase biodiversity on your business site. Provide an annual sum for staff to undertake new biodiversity projects.

Review your grounds maintenance contracts to ensure replacement planting is regularly completed as trees/shrubs die or out-grow their sites. Use new plant species that will benefit local biodiversity.

Sponsorship

Businesses can assist in the development of **Local Biodiversity Action Plans**. Many of the Ecosystem Group plans are in preparation and will be regularly reviewed e.g. woodlands, ponds and urban. One may be particularly appropriate to your business.

Support in the Community

A business can support a community with some small financial contribution, or perhaps some volunteer help from staff. Biodiversity projects in the community have many benefits – improving the quality of the local environment (e.g working on a Local Nature Reserve), assisting enthusiastic community groups (e.g a youth club carrying out a planting project), or interesting local school project (e.g creating its own wildlife garden).

Useful Contacts

North East Scotland Local Biodiversity Partnership

C/O The James Hutton Institute, Craigiebuckler, Aberdeen, AB15 8QH

Tel: 01224 395189

www.nesbiodiversity.org.uk

Aberdeen Greenspace

Doig Scott Building, Craibstone Estate, Bucksburn, Aberdeen AB21 9YA

Tel: 01224 711129

www.aberdeengreendspace.org.uk

Buchan Countryside Group

www.bcgroup.freeserve.co.uk

Scottish Natural Heritage

Inverdee House, Baxter Street, Torry, Aberdeen AB11 9QA

Tel: 01224 266500

www.snh.gov.uk

Scottish Environment Protection Agency (North Region)
Graesser House, Fodderty Way, Dingwall IV15 9XB
Tel: 01349 862021
www.sepa.org.uk

RSPB East
10 Albyn Terrace, Aberdeen AB10 1YP
Tel: 01224 624824

Council Ranger Services

Aberdeenshire Council Ranger Services
www.aberdeenshire.gov.uk/rangerservice

Aberdeen City Ranger Services
www.aberdeencity.gov.uk/parks

Moray Council Ranger Services
speyside.way@moray.gov.uk

North East Bat Group
www.nesbats.co.uk

REAP (Rural Environment Action Group)
www.reapscotland.org.uk

For more information and advice see also
Biodiversity Advice Note No. 9

ON-SITE ACTION

A business's staff can provide the main source of ideas, skills and commitment, for biodiversity initiatives on its own land or sites, or externally in the community.

Identify the skills and interests of your staff. There will be staff with interests in the natural environment and/or have gardening skills. Helping staff to develop and practice such skills is to the long-term benefit of the business, as involvement in biodiversity initiatives enhances loyalty to a business, can increase job satisfaction, and is a healthy pursuit for staff.

Examine what Environmental Management Systems could be developed for the practices and procedures that exist in your business. EMS are a form of direct action by a business to consciously examine how they operate – looking at their practices and procedures. Each business needs to investigate what effects their operations have on the environment on the business site and in the local community.

What can be done on the business site? No matter how small or restricted the business site there is something that can be done to enhance biodiversity. Carry out a **site survey or audit** to see what exists in terms of plant species and other wildlife. You may need some outside assistance to carry this out (see contacts).

In the centre of a city the options to increase the variety of habitats and wildlife on a site are more limited, but you can put up **bird-boxes**, and use hedging instead of walls or fences. **Hedges** which have flowers and berries are good for wildlife, or choose hedging plant species that have thorns to make a more robust hedge in an urban situation.

Where **trees** can be planted, do not plant forest scale trees (e.g Beech, Oak or Sycamore) close to buildings or roads. Instead, choose smaller growing trees appropriate to the North East, such as Gean, Birch or Rowan. Where there is space for larger trees to grow up and out, Wych Elm, Whitebeam or Scots Pine are appropriate.

Shrub species can be found in all sizes and types of areas, from sunny to shaded spots, small and large areas. Think about leaf colours, flowering and fruiting seasons, growing habits and pruning requirements.

If the soil is poor in parts of your site, this is beneficial to **wild flowers** which prefer low soil fertility. There is a great choice of wild flowers that are native to the North East, such as Oxeye Daisy, Red Campion, Cowslip, Wild Pansy, Primrose, Thyme, Thrift, Foxglove and Cornflower, to name just a few.

2. ON-SITE ACTION

Try to use **planting stock of local origin**. Local plants have adapted to local conditions and provide the creatures that depend on them with the exact food and shelter that they need at exactly the right time.

Biodiversity Advice Notes No 5 'Site Development' gives more advice on developing a planting scheme for your business site.

Empowering staff to develop the ideas for your site, monitoring the progress of the work, and monitoring the wildlife itself is the best way forward. Staff are observing these areas every day, and will take an interest in their enhancement.

Businesses should set aside a small sum of money for the development of a small-scale biodiversity initiatives on their sites by staff – to purchase features like bird-baths or boxes, or materials like wild flower seeds. Offer **prizes for good ideas** on a biodiversity project on the business site.

New ideas can be generated through **Staff/Business Newsletters** with informative articles about biodiversity on the site or in the area.

You may think that your site is well enough landscaped. Yet there are always **opportunities to replant areas** where existing planting has become damaged, has died back, or has outgrown its area. New parking areas or buildings may be developed. For all of these occasions, there is an opportunity to review the planting in the area, and change the range and quality of the plants. Instead of planting for only amenity purposes, think about the opportunity to enhance the biodiversity in the area.

Refer to Biodiversity Advice Notes No.5.

Commitment to environmental improvements is good for business's own credibility, and good for the communities in which they become established.

3. SPONSORSHIP

The natural ecosystems around us and their resident plant and animal species, give us pleasure, provide attractive surroundings, and support a sustainable environment. But unsympathetic developments, pollution and some modern farming practices threaten the continued survival of many of our native species and habitats. The North East Scotland Biodiversity Partnership has developed a Local Biodiversity Action Plan (LBAP). This is linked to the UK Biodiversity Action Plan, which sets out targets for the UK for priority species and habitats.

The Local Biodiversity Action Plan focuses efforts, by many organisations working towards shared goals, to conserve a range of important species and habitats for our benefit, and for future generations. Actions are organised through the framework of Action Plans, which are devised and administered by a number of Ecosystem Groups. The Ecosystem Groups are:

- Freshwater and Wetlands
- Woodlands
- Lowland and Farmland
- Marine and Coastal
- Urban and Communities

Once the Action Plans have been published, the Partnership implements them through its partner organisations, through public awareness raising, and through local initiatives with land owners and environmental interest groups.

Funding

As the LBAP develops, the amount of action for local wildlife expands. Business Sponsorship is one key way to facilitate this work, and helps to widen the knowledge and participation of individuals, groups and organisations in the protection of local biodiversity.

Not all businesses have the capacity, to take on-site action (as described in Advice Notes 1 and 2) themselves, but could assist the North East Biodiversity Partnership to develop and implement biodiversity initiatives across the North East of Scotland. A business can choose to be associated with a particular species or habitat that is either relevant to their location or their particular type of work. Input can vary from providing technical assistance, to the direct financing of parts of the necessary field work. Staff in the business may wish to lend some effort or expertise to, for example survey or planting work, as an Action Plan progresses.

For more information or to discuss how your business can become involved, contact:-

www.nesbiodiversity.org.uk

4. SUPPORT in the COMMUNITY

Support in the Community can take a number of different formats:

- Staff team-building using a biodiversity project as the core activity.
- Contributing to a local school or community biodiversity project.
- Donating expertise to a local biodiversity initiative.

Staff team building working together to resolve environmental problems, or to create a wildlife area, can bring together staff who may not normally meet together face to face to discuss important practices, procedures or performance. A group project may involve clearing some scrubland, or planting new trees, shrubs and wild flowers in an area that may be requiring some volunteer labour, such as Local Nature Reserve, or an overgrown pond.

Schools and community biodiversity projects often lack funds to purchase the right materials for the schoolchildren and local volunteers to use. This could include materials such as planting stock, protective fencing, or some bird and bat boxes. Businesses can provide small amounts of funding to a local school to assist in creating a wildlife garden. This is a valuable educational exercise for the young children, raising their awareness of biodiversity issues in their school environment. In addition, it is often the case that the provision of funding for minor environmental improvements in locations close to a business site results in invaluable local publicity for that business, as well as improving local amenity for a community.

Contacts: The Local Council Ranger Services (see Advice Note no. 1)
The Local Community Councils (details from Local Authority websites)

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SUPPORT in the COMMUNITY



Donating some of the skills and knowledge that a business has, for the benefit of a local community project, is of considerable benefit to local business as well. This is already widespread in the field of businesses supporting local sport, but can extend into local biodiversity projects. Many firms have staff skilled in producing publicity or leaflets, or in drawing, surveying and/or mapping skills. These skills can be used to assist in raising awareness of important wildlife habitats or species in a local community, or in describing local walks with a range of interesting wildlife.

Contacts: The Local Community Councils (details from Local Authority websites)

www.aberdeenshire.gov.uk/communitycouncils

www.aberdeenshire.gov.uk

Getting involved with biodiversity projects will link your company with good environmental practice. A commitment to environmental improvements is good for a business's own credibility and good for the community in which you are established.

5. SITE DEVELOPMENT

Before and during the development of a new business site, or when an existing site is being altered or redeveloped, there are a number of steps to go through if you want to incorporate good biodiversity principles into your site.

1. Establish what natural assets already exist

Before designing or carrying out any landscaping works find out what range of plant and other wildlife species already exist on the area of ground to be landscaped, and establish what sort of vegetation is growing in the locality. The quality of soil and ground conditions (wet/marshy/peaty/dry) needs to be identified.

2. Retain existing habitats & features of value for wildlife

As well as specified protected sites, there are many areas which provide important habitats in their own right, as well as providing an essential network of links and stepping stones for wildlife. In addition to the more obvious habitats such as woodlands, hedges and wetlands, others such as buildings, walls and bridges are often used by wildlife, particularly birds and bats for nesting and roosting. Where no significant natural habitats exist, these should be conserved and enhanced. Where no significant natural habitats exist, then new habitats which relate to other natural environments in the locality should be considered for inclusion on the site.

3. Avoid adverse impacts on protected or important species

Certain rare and/or vulnerable species are protected under national and European legislation. The level of protection varies, but for most species it is illegal to kill, injure or take such a species from the wild or to disturb the species while it is in its place of shelter or knowingly destroy the species' place of shelter. (Advice on protected species is available from Scottish Natural Heritage SNH). The scale and significance of any new landforms on the sites, should be properly assessed – to consider any indirect effects on adjacent or nearby sites. (These may include increased run-off from a site affecting local hydrology.)

4. Consider the potential for habitat creation and enhancement

Habitat creation and enhancement makes an important contribution to biodiversity, particularly where urbanisation or intensive agricultural production has taken priority, in the past. Wherever new landscaping works are planned, there are opportunities to enhance and create links between existing habitat patches, reducing isolation for wildlife. Innovative solutions for sustainable urban drainage (SUDS), for example can create new valuable wetland habitats. (Advice may be obtained from SEPA)

5. Use indigenous plant species, and plants of local provenance

While some exotic tree and plant species may be acceptable in limited and formal landscaping designs, the norm will be for new planting to consist largely of trees and shrubs that naturally occur in the area, and that have been grown from seed sourced locally, wherever possible. Local Plants have adapted to local conditions, and provide the creatures that depend on them with the exact food and shelter that they need at exactly the right time. Trees and shrubs that are appropriate are listed in separate Biodiversity Advice Note No. 9. Different localities will favour different mixes of planting (due to soil conditions and degree of exposure for example), as will the functions of planting scheme (for screening, amenity, hedging or ground cover).

6. Use existing characteristics of the locality

Exploit existing characteristics of the locality, be this ponds, wet and marshy areas, wildflower verges, or a network of hedges and drystone walling. These all add to the local biodiversity, and extend the range of plants and wildlife in the area. Areas of poor soil are ideal for wild flowers and these should be sown with a wild flowers and these should be sown with a wildflower seed mixture appropriate to the area.

7. Consider the spread of flowering and fruiting seasons

In order to optimise the value of new landscaping works both for amenity and wildlife purposes, the mix of plants should endeavour to have trees and shrubs which have different blossoming/flowering times, spread across as many months as possible. The flowers and fruits will attract bees, insects and birds, adding to the biodiversity of an area. Using ground cover plants such as heathers will extend the flowering seasons, as will the planting of spring flowering bulbs.

Use peat- free compost

91% of Scotland's precious peatland habitat has been damaged by drainage, invasion by scrub, forestry plantations, peat working, and conversion to agriculture or development. Use of peat-based compost has contributed to the exploitation of peat bogs, and a peat-free alternative, available from good garden centres, should therefore be used instead.

8. Consider the potential for access provision to areas of natural interest

There are opportunities to create pedestrian footpaths through new landscaped/wildlife areas, and to link these with a local network of paths in a town or out into the countryside.

9. Plan for the long-term management of habitats

Planning for the future management of all landscape areas is a critical requirement to safeguard the nature conservation value of a site. Where existing features are retained and/or there is a habitat creation, or where enhancement measures are proposed, the management regime and costs must be explicit from the start, and be part of any design and implementation package.

This should cover the following range of considerations:

- Mowing regimes
- A standard for the replacement of dead trees, shrubs or other plants with the same species in the first planting season following;
- Standards set up for pruning practices (timings and severity), appropriate to allow shrubs to grow/flower/fruit to their maximum potential;
- The shredding of all prunings to provide mulch/compost on site.

6. ENVIRONMENTAL MANAGEMENT SYSTEMS

All businesses have quality standards. These may be explicitly set out in the Company annual reports, or perhaps as instructions on office and/or workshop walls, or are passed on by word of mouth about how customers are treated and services provided. Some of these standards have emerged 'ad hoc' or have been developed through training and developing best practice.

Environmental Management Systems are a form of direct action by a business to consciously examine their practices and procedures, with particular regard to what effects the business has on the environment generally, and with a view to minimising its impacts and mitigating any harmful effects.

Almost all businesses have to use paper – but where it is sourced from and what happens to it after it has fulfilled its purposes in the business? All these have environmental impacts, and a business that cares for the environment and the effects that the business has on the environment, will examine these questions and develop its own standards in terms of the type and source of paper it uses the issues of paper consumption and usage within the business, and practices for the disposal/recycling of the waste paper.

Environmental Management Systems should be tied in with other management systems that cover Health and Safety, or Staff training and Development, as these are all closely interrelated. There are a number of Regulations that all businesses have to comply with in terms of health and safety, and good employers already have their own staff training and development policies.

Quality standards are important for many businesses when choosing suppliers and contractors. Having accreditation in terms of quality management systems is growing in importance. Businesses recognise the value of achieving accreditation themselves, or insisting on all businesses that do work with/for them have accreditation such as ISO 9000, or ISO 14001. Environmental policies need to be developed by each business before embarking on the preparation and adoption of Environmental Management Systems.

For some businesses involved in, for example the construction industry or land management services, then environmental standards are fundamental to their day to day working, and make an important contribution to a business's reputation, and ultimately its success.

Whether or not a business goes for formal accreditation, effective environmental management is good for the efficient operation of a business, and it can provide a competitive edge for the organisation.

What to do

- Establish a commitment to the environment across the company. An Environmental Policy needs to be developed at the most senior level, to give priority to quality environmental management.
- Carry out an audit of what your business does, starting with areas such as activities, processes, purchases, land usage and wastes produced.
- Examine all the environmental impacts from the current practices and procedures within the business. Are there better ways to do things, or different sources for supplies that would have a lesser impact on the environment? Do you have emergency procedures if spillages occur on your site? Are you aware of where your suppliers or contractors source their materials from?

For example, are you using recycled paper, or paper that has only been sourced from sustainable forests; planting indigenous trees from local sources; washing down company vehicles only on a hard surfaced area with an oil interceptor in the drains; collecting all waste oil or chemicals in a sealed container; composting all green wastes and clippings?

- Set out the business's new practices and standards for the processes where changes are proposed, indicate those who are responsible for implementation, and explain the purpose of these changes to all staff.
- Set some targets to be achieved within set time periods (it may not be feasible to change over immediately for financial or contractual reasons). Allocate the monitoring of these targets to specific individuals.

It is important to get staff involved in the audit, the examinations, the target setting and the solutions. Staff will often be very innovative and more committed to the development of new procedures if integrated into the system early on. Where there may be resultant savings in costs, then rewards should be considered. Information gaps will emerge, but these can be allocated to staff to research further.

- Monitor the implementation of the changes established, and Review whether the practices and procedures need to be altered in the light of new company policies and targets. Involve all your staff in this process.

Not all changes will result in savings. These may follow later through reduced wastage, but in many occasions a business may not be the direct beneficiary of changes in practice – it may be the local fishers who have a much cleaner river, or the local birds may have more shelter and food from the trees, seeds and berries in the replanted business grounds. Staff will have the satisfaction of improving the local environment or local biodiversity and contributing towards a more sustainable future.

Further reading:

"Business & Biodiversity – A UK Business guide for understanding and integrating nature conservation and biodiversity into environmental management systems"
Earthwatch 1999.

Download PDF – 309k from www.businessandbiodiversity.org/publications/bandb.pdf

To request a free printed version of this publication, email bbrc@earthwatch.org.uk

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BUSINESS CASE STUDIES



BIODIVERSITY ADVICE NOTES **for** BUSINESSES

8. PLANTING for BIODIVERSITY

When planting up or landscaping a business site, or redeveloping part of your existing site, the emphasis should be on using indigenous plant species, i.e trees, shrubs and other plants that are native to your area, and which have been sourced locally, grown from local seed/stock. That way, you are using plants that are likely to grow more successfully in your locality, maintaining local genetic diversity, and supporting the wildlife that depend on indigenous plants.

This advice note provides just some of the general species of plants to consider when planning some new planting. Particular species advice can be sought from the references below, and from the local suppliers listed on the Contacts Sheet (see Biodiversity Advice Note No 9)

Trees

Use smaller growing trees closer to buildings, think of their growing habits, blossom and berries, and autumn colours, to give a variety of wildlife and amenity benefits. Trees such as Willows and Alders will prefer damper situations.

Smaller Trees

Gean	Bird Cherry
Birch	Hazel
Rowan	Crab Apple
Alder	Willow

Larger Trees

Scots Pine
Ash
Oak
Wych Elm

Hedging

Using hedges to define areas and boundaries is good for wildlife and is more attractive than most fences and walls. Prickly plant species can provide an effective barrier to intruders. Hedges provide food and nesting sites for birds i.e. berries, and shelter for insects and small mammals. Hawthorn, for example, can attract over 200 species of insects, which in turn are an important food source for birds and mammals. Hedging can also, once established, provide effective windbreaks. Hedges can consist of a single plant species, but the best type of hedge contains a range of species.

Hedging plants

Hawthorn	Blackthorn	Berberis
Beech	Hazel	Honeysuckle
Cotoneaster	Holly	Wild Roses

Shrubs

These provide attractive flowering and/or fruiting, and are good for insects, moths, bees and butterflies, as well as birds. Think of mixing the flowering and fruiting plants, providing colours at different times of the year. Use evergreen shrubs to provide some winter foliage and cover.

Climbing plants can be used to help screen unattractive walls and fences.

Rosa Rugosa	Buddleia	Elder	Holly
Cotoneaster	Gorse	Bramble	Lilac
Weigela	Broom	Dogwood	Honeysuckle
Pyracantha	Snowberry	Flowering Currant	Russian Vine

Ground Cover

By planting up steep banks and awkward corners with ground cover plants, this will prevent soil erosion and reduces ground maintenance (weeding and/or grass cutting). This also benefits biodiversity. Some plants give year round vegetation cover, some are deciduous losing their leaves over the winter months. Shrubs such as Juniper or Cotoneaster have attractive horizontally growing varieties.

Suitable Plants

Heathers	Ivies	Thyme	Juniper
Vinca	Cotoneaster	Hebes	

Wild Flowers

These will grow on poorer soils and can give a colourful display in small areas, or through larger areas of grassland. Wildflowers provide a rich source of nectar for butterflies and other insects. For wildflower meadows, special maintenance practices are required, but over a full year the maintenance costs should be less than for regularly mown areas.

Some wild flowers are from bulbs, others are annual, biennial or perennial plants.

Cornflower	Primrose	Oxeye Daisy	Harebell
Lupin	Cowslip	Ragged Robin	Thyme
Forget-me-not	Thistle	Poppy	Snowdrop
Wood Sorrel	Wild Strawberry	Wild Pansy	Foxglove

Wet Areas

This special type of habitat has its own range of appropriate plant species from trees, to shrubs, grasses and wild flowers. Rather than draining these areas to allow 'normal' planting, exploit the area by using a whole range of wetland plants.

Willow	Meadowsweet	Hard Rush	Common Reed
Alder	Marsh Marigold	Yellow Flag Iris	Sedge

Maintenance

Carry out an annual review of the site to assess the health and success of your planting. Replace dead or damaged plants as soon as possible. Prunes plants that need reshaping- but study or take advice on correct way to prune each of the different plant species. Some shrubs require careful pruning (not clipping like a hedge) in order to give best flowering potential.

Cut wildflower meadows after the flowers have set seed. Allow the seeds to spread back into the soil before removing the cut vegetation from the meadow.

Try to compost on the site as much of your grounds maintenance wastes as possible (not perennial weeds). Prunings and trimmings from hedges and shrubs can be shredded and added to compost, or used as mulch.

Some rotting timber/branches left in odd corners is beneficial to fungi, invertebrates and small mammals such as hedgehogs.

References: *Creating Environmentally Friendly Gardens* by Bob Davis published by Aberdeenshire Council
Plant for Wildlife Scottish Natural Heritage
Hedge Your Bets Scottish Police Service/Scottish Natural Heritage

10. USEFUL CONTACTS (for more information & advice see Biodiversity Advice Note no. 1)

Suppliers

Christie Elite Nurseries Ltd – plants for forestry, landscaping and amenity. Scottish provenance available. Forres, Moray IV36 3TW
Forestry Tel 01309 672633 Fax 01309 676846
Amenity Tel 01309 678803 Fax 01309 678809
Email: sales@christie-elite.co.uk

Curam (Fyvie) – variety of local provenance trees and wildflower plugs
John Malster, Jaffrey Cottage, Mill of Crichtie, Fyvie, Turriff AB53 8QL
Tel: 01651 891395 Email: curam.fyvie@virgin.net

Easter Anguston Farm – local provenance wildflower plugs (small range)
Peterculter AB14 0PJ
Tel: 01224 733627

Forvie Tree Nursery – variety of local provenance trees and wildflower plugs.
Bob Davis, South Mains of Auchleuchries, Hatton, Peterhead, AB42 0TQ
Tel/Fax 01358 711292 Email: bob.b.davis@btinternet.com

Scotia Seeds – Scottish provenance wildflower seeds
Mavisbank, Farnell, Brechin, Angus, DD2 6TR
Tel: 01356 626425 Fax 01356 629183

Scott's Wildflowers – Scottish provenance wildflower plugs to order.
Swallow Hill Barn, 31 Common Side, Distington, Workington, Cumbria CA14 4PU
Tel: 01946 830486 Email: Wildflowers@btinternet.com
Web: scottswildflowers.co.uk

North East Pallets – woodchip supplier
Greenwell Road, Tullos, Aberdeen Tel: 01224 891219 Fax: 01224 891219

Wood RecyclAbility – bird boxes, various wooden constructions
Cloisterseat Croft, Pitmedden, Aberdeenshire
Tel: 01651 842876