

## Enhancing biodiversity in your grounds

Find out how you can manage the habitats in areas such as open spaces, greenspace, golf courses, school grounds, parks and gardens to benefit and enhance biodiversity.

No matter what types of habitats are found on your site or in your grounds, there are simple and effective ways of incorporating measures to benefit biodiversity. [Biodiversity on a Budget](#) has some useful suggestions.

The sections below provide information on what the benefits for biodiversity of various habitat types are and information and advice sources where you can find out more about providing and managing them for nature where you are. This resource is not exhaustive and you can find many other options searching the internet.

### At a glance enhancement for species – invertebrates, birds, mammals

#### Key points

- Species can be supported through provision and management of appropriate habitats, and by providing special features for example specialised nest or roost boxes, hibernation sites, log piles and artificial feeding stations. A number of organisations provide species specific advice and links are provided to these below and throughout this document.
- Many birds such as blue tits and robins are highly visible. Nest boxes and feeding stations provide focal points to view their activities, and nest boxes with webcams allow you to see their family life at close quarters.
- Insect species such as bumblebees and butterflies are also appealing and easy to observe. Attract them with areas of flower-rich habitats and native trees and shrubs.
- Bats and other nocturnal species such as newts and moths are less visible but can be just as fascinating as others like birds and butterflies. Bats can be counted as they leave their roosts at night to feed on insects including midges; newt tadpoles can be seen in ponds, but adult newts also need places like log piles and compost heaps; moths can be observed at bright lights at night and there are other means of attracting them with sugary mixes; many moths are very colourful and put their relative butterflies to shame!
- Species of at least local importance can be identified through your Local Biodiversity Action Plan, or by doing a simple site survey, and links can be made with national species monitoring schemes such as [Big Butterfly Count](#) or the [Big Garden Birdwatch](#) to name but a few.

#### Further information

- [Biodiversity on a Budget](#)
- [Biodiversity on Campus An EAUC Practical Guide section “Buildings & structures”](#)
- [RSPB and Conservation and sustainability for teachers](#)
- [BBC Gardening plants for bumblebees](#)
- [Pollinator Strategy for Scotland 2017-2027](#)
- [Bat Conservation Trust](#)
- [RSPB](#)
- [Butterfly Conservation](#)
- [Moths Count](#)
- [Froglife](#)

- [Mammal Society](#)
- [Scottish Wildlife Trust](#)
- [Local Biodiversity Partnerships](#)

## Trees, scrub and hedgerows

### Key points

- Trees provide shade, shelter, structure on a site as well as food and nesting sites for wildlife. Appropriate native tree species should be chosen to fit site conditions.
- Groups of trees or woodland provide areas of habitat used by a ranges of birds, pollinating insects and other animals and for example could allow for the development of forest school activities if within school grounds.
- Keep fallen and standing dead wood where possible. This provides an essential habitat for a wide range of our less visible species such fungi, beetles, woodlice and others which break down dead wood and leaves and return them to the soil. Wood piles also provide shelter and food opportunities for birds and small mammals, as well as hibernation sites for overwintering butterflies such as the Small tortoiseshell.
- Scrub patches with species such as hazel and willow provide cover and shelter for local wildlife.
- A hedge with a mixture of native species such as dog rose, hawthorn, and holly is a valuable wildlife resource. Thorny hedges can also provide shelter for exposed areas, and even for catching litter!
- Any management of woodland, hedges and scrub should be carried out to avoid sensitive times for wildlife such as bird nesting periods.
- Mature and veteran trees might require inspection and perhaps tree surgery to maintain their longevity.

### Further information

- [Nature's Calendar](#) - survey periods and sensitive lifecycle stages for species and habitats in Scotland
- [Woodland management manual](#)
- Broad and Priority [habitat definitions](#) for woodland and hedgerows.
- [Biodiversity on Campus An EAUC Practical Guide](#) section although aimed at higher and further education establishments this guide has a lot of useful practical information and case studies
- [Making contracts work for wildlife: how to encourage biodiversity in urban parks](#) especially pages 46-53 [Eco-schools Scotland](#)
- [See Woods In and Around Towns \(WIAT\) programme](#)
- [Scottish Golf – Nature](#)

## Grasslands and meadows

### Key points

- Mowing regimes of close-mown swards can be altered to allow longer areas of grass with more flowering species, and structural diversity to develop.
- New areas can be sown and managed as either annual or perennial wildflower meadows. Seeds can also be grown in plug trays and planted out into existing areas of grass.

- Creating new, or managing existing, grassland as flower-rich meadows provides nectar- and pollen-rich resource for pollinators, as well as food, cover and nesting resources for other wildlife.
- Areas of natural grassland usually occur on fairly poor soil with low fertility. This should be borne in mind if you are planning to create a wildlife grassland area.

### Further information

There are many sources of information about managing grasslands for biodiversity. Some of the most useful are outlined below:

- [Springs and flushes booklet](#) (SNH)
- [Grasslands for plants and animals](#) (SNH)
- [Grasslands booklet](#) (SNH)
- [Using wildflower seed mixes for grassland creation](#) (SNH)
- [Start a wildflower meadow](#) (RSPB)
- [The Wildflower Garden](#) (Plantlife)
- [Land management for butterflies](#) (Scotland's Rural College)
- [Grassland Gems: Managing Lawns and Pastures for Fungi](#) (Plantlife)
- [Grassland Cutting and Enhancement](#) has more detailed information on how to enhance your grassland areas for wildlife
- Broad and priority [habitat definitions](#) for grasslands
- [Biodiversity on Campus An EAUC Practical Guide section "Wildflower meadows"](#)
- [Making contracts work for wildlife: how to encourage biodiversity in urban parks](#) See pp30-31;34-35;49
- [RHS Wildflower meadow establishment](#)
- [Pollinator Strategy for Scotland 2017-2027](#) – Strategy, Implementation Plan, Technical Annex and [Information and Advice Resources](#).
- [Scottish Golf – Nature](#)
- [Gardening for pollinators leaflet](#)

## Ponds and wetlands

### Key points

- Freshwater and wetland habitats support a huge diversity of life.
- Where deep water is a concern, consider creating bog and other wetland habitats instead, or shallow areas of water, which will all benefit wildlife as well as your enjoyment.
- Wetlands and ponds require occasional maintenance to retain their value.
- Don't introduce invasive non-native plants and animals as if these escape into surrounding habitat they can cause damage to the habitat and its native species.
- Wildlife features can be included as part of a Sustainable Drainage System (SuDS) and Water Sensitive Urban Drainage (WSUD).
- If you have a stream in your grounds consider how any existing culverts or canalisation could be restored to a more natural state or enhanced for wildlife. These features greatly reduce the ecological and amenity value of watercourses.

### Further information

- [How to manage ponds and wetlands – a simple guide](#) (TCV)
- Broad and Priority [habitat definitions](#) for freshwaters

- [British Dragonflies](#)
- [Froglife](#)
- [ARC trust](#)
- [Buglife - Wildlife Gardening](#)
- [RSPB – Gardening for Wildlife](#)
- [Biodiversity on Campus An EAUC Practical Guide section “Ponds and other wetlands”](#)
- [RSPB Sustainable drainage systems – maximising the potential for people and wildlife](#)
- [City Frogs: understanding the value of sustainable drainage \(IALE\)](#)
- [Making contracts work for wildlife: how to encourage biodiversity in urban parks](#) pp 25; 52
- [Susdrain - Biodiversity benefits](#)
- [Susdrain – Wetlands](#)

## Gardens, Containers and Hard-landscaping

### Key points

- Borders, raised beds and containers can provide growing areas that are at the same time attractive and productive, and valuable for wildlife.
- Even hard landscaping can be made more wildlife-friendly with appropriate design and choice of materials. Tubs and planters can be used to provide small areas of ‘habitat’ - flowering plants and herbs attract beneficial insects such as butterflies, bees and hoverflies. Planting nectar- and pollen-rich plants supports pollinators and seed/fruit bearing ones to provide food for birds and small mammals.
- Insect-friendly, seed mixes of annual plants provide a cheap temporary ‘fix’ and quick results, and native species mixes have the added benefit of self-seeding for future years. But planting areas native perennial species will help to reduce the need for sowing or planting each year.
- Allotment gardens whether for flowers, vegetables, fruit or all of these are valuable to wildlife – and the wildlife can benefit you by pollinating your produce, or eating the pests.
- Avoid using pesticides and herbicides - the insects, slugs etc. that you find annoying in your garden or allotment are often a natural food source for other species such as birds or hedgehogs.
- Use peat free planting media, sustainable materials for structures and incorporate a small composting area to produce your own home-made compost for future years.
- Consider making a small water garden in a large half barrel. This will provide somewhere for wildlife to live, drink or keep cool.
- You could create feeding stations for birds, put some bird boxes in trees and close to areas of scrub, and even put up some bat boxes in trees as well.

### Further information

- [Gardening for pollinators leaflet](#)
- [Garden for Life leaflet series](#) (PDF downloads)
- [Buglife - Wildlife Gardening](#)
- [RSPB – Gardening for Wildlife <https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/>](#)
- [BTO – Wildlife Gardening](#)
- [Biodiversity on Campus An EAUC Practical Guide section “Wildlife gardening”](#)
- [Scottish Allotments and Gardens Society](#)
- [Bat Conservation Trust](#)

## Parks & recreation areas

### Key points

- Much of the information in other sections above and below can be applied to parks and recreation areas and help to make them more useful to wildlife, and at the same time make them more interesting for the people that use them.
- Play and recreation areas can incorporate natural elements that contribute to the experience and promote biodiversity.
- Choose species of plants for both sensory and wildlife value, and include sustainable materials that can also enrich habitats such as log piles and large stones or boulders. These provide habitats for invertebrates, fungi, mosses and lichens, as well as perches for birds and small mammals.

### Further information

- [Creating Climate Change Parks](#) - although primarily about making parks more valuable to reducing the impacts of climate-change in urban areas this also adds value to parks and recreation areas from a biodiversity perspective.
- [Design for play: a guide to creating successful play spaces Play England/DCMS](#) Page 78 – 79 lists plants and planting guidelines but try to use plants which are suited to your area, soil and climate and especially make sure they are beneficial to wildlife.
- [Scottish Golf - Nature](#)
- [Gardening for pollinators leaflet](#)

## Brownfield sites

### Key points

- Natural colonisation of derelict sites, often on a poor substrate or soil, can be a fascinating process to observe. Allowing bare areas to colonise naturally is particularly valuable as naturally colonised sites with minimal intervention can result in a rich diversity of species.
- Some sites will qualify as the UKBAP priority habitat type 'Open Mosaic Habitats on Previously Developed Land' and as such should be retained wherever possible.
- Perceptions will have to be managed to avoid the misconception of neglect and to get community support if it is a public site.

### Further information

- [Identifying Open Mosaic Habitat \(Buglife\)](#)
- [Making contracts work for wildlife: how to encourage biodiversity in urban parks](#) pp15; 53
- [Open Mosaic Habitats on Previously Developed Land](#) – UKBAP Priority Habitat
- [Open Mosaic Habitat Inventory \(Buglife\)](#)

## Living roofs, green roofs & living walls

### Key points

- Living roofs can be created to benefit wildlife. They use a thin layer of low nutrient growing medium on top of various layers which protect the building and the low nutrient soils are ideal for the wildflowers and plants that attract pollinators and other bugs, which in turn can be a source of food for birds.
- Green roofs are typically created to help control heat effects in towns and cities and typically use grass or sedum carpets. They have good insulation properties keeping the building warm in winter and cool in summer.

- Living walls use non-climbing plants set into a vertical structure in a growing medium matrix that mimics their natural requirements of shade tolerance etc.
- Vertical structures such as walls and fences can be valuable for growing climbing plants

#### **Further information**

- [Living Roofs](#) (Buglife)
- [Creating Green Roofs for Invertebrates](#) (Buglife)
- [Living Roofs and Walls study report London Plan policy](#)
- [Publication: \*The Developers Guide to Green Roofs\*](#) The Green Roof Centre
- [Living Roofs](#)