

Biodiversity Toolkit

Introduction

Urban green spaces are important places for wildlife in the UK, but many are not as good as they could be. This Biodiversity Toolkit provides information on how you can improve, maintain, and monitor green spaces around your Scheme for wildlife.

What is biodiversity and why is it important?

Biodiversity is the variety of life on Earth, in all its forms and all its interactions. This includes everything from microorganisms, plants and animals to the natural systems that support them. Biodiversity describes our natural wealth, which makes up the living landscape around us, sustains ecological systems and enhances our quality of life.

Biodiversity enables our natural systems to function properly by providing many important services such as soil formation and nutrient recycling, and pollution breakdown and absorption, as well as biological resources such as the water we drink, the air we breathe and the food we eat.

Cultural

The presence of trees in urban areas provides people in towns and cities with daily access to nature on their doorstep, helping to relieve stress, improve emotional well-being and strengthen their connections to nature.

Nature, biodiversity, and well-being

There is a growing body of evidence demonstrating a connection between engagement with the natural environment and improved well-being. Numerous studies have found that daily contact with nature is connected to better health through reductions in obesity, stress levels and improved concentration.

A little goes a long way

A recent study found that significant health improvements can be gained from just two hours of exposure to nature a week. This effect was the same for people regardless of age, income and whether the person lived in urban or rural areas. It did not matter whether the two hours were taken in one go or in a series of shorter visits.



The Sustainable Seven!

We've created a list of ways to improve our natural environment and encourage more wildlife. We like to call it the 'Sustainable Seven!' Seven simple handy hints that could easily be implemented into our green spaces, large or small.

Let it Bee!

1. Reduce mowing



Reduce or stop mowing in certain areas. Where it is safe to do so, maybe only cut a pathway and leave the rest to grow. By leaving areas to grow long it is a big help for insect wildlife. The mini jungle created by the long grass gives them a safe place to hide and if there are wildflowers there, it's also good for the bees. So, if you can, 'let it bee!'.

What is plug planting?

Plug plants are small, rooted seedlings or cuttings that have been grown in trays or individual cells. They are a ready to plant unit.



Benefits

- Enables existing wildflowers and grasses to grow, flower and then set seed. This will increase the overall floral diversity of the grassland and provide more resources for a greater variety of wildlife (such as seed-feeding birds).
- A mosaic of vegetation at varying heights increases the diversity of habitat structure. These different 'micro-habitats' and 'micro-climates' support a greater diversity of animals as different species require different conditions. Areas of longer vegetation provide refuge from predators and weather
- Reduced mowing can save time, energy costs, and for schemes with gardening services, may reduce management costs. Please consult with your Location Manager if this is something you are interested in.

2. Wildflower Enhancement



Wildflower seeds and plug plants increase floral diversity at a low cost. Plant plug plants and scatter seeds into spaces in existing grassy areas between April and May after the main frosts have finished. This will help create more habitat and increased resources for pollinating invertebrates like bees.

Benefits

- Greater floral diversity creating more habitat and increased resources for invertebrates and other wildlife such as birds and small mammals.
- Adds colour and interest for people to enjoy

3. Re-seed grassland with native meadow mix



Native meadow mix is a combination of 7 grasses and 16 wildflowers and when used to re-seed grassland, improves floral diversity and can help reduce the need to mow. This creates a greater variety of habitat structure and more resources for insects and other wildlife like birds and mammals. Avoid sowing double-flowered varieties, as these produce little nectar.



Benefits

- Greater floral diversity creating more habitat and increased resources for invertebrates and generally enhancing biodiversity.
- By leaving certain areas to grow longer and support greater floral diversity you will also provide a greater variety of habitat structure which will also increase biodiversity.

4. Provide vertical planting



Where space is limited, you can help by growing climbing plants. Wildlife-friendly climbers include honeysuckle, jasmine, and clematis. They can provide a useful source of nectar for pollinators and are great to look at and smell, too!

Benefits

- Increases overall floral diversity where space may be limited.
- Provides important nectar sources and host plants for a wide range of insects.
- Fruits and seeds provide an important food source for a variety of wildlife.
- Structure also provides suitable nesting sites for birds and overwintering habitats for invertebrates.

5. Plant container pots



Containers are particularly useful if there is limited green space. You could use hanging baskets, window-boxes, tubs, and pots. Both native wildflowers and ornamental flowers, shrubs and herbs can be grown.

Benefits

- Provide flowering resources in areas with limited green space.
- Increases in floral diversity support insect diversity, with positive knock-on effects to overall biodiversity

6. Bug hotels and nest boxes for solitary bees



Install artificial bee nesting boxes and habitats for wildlife to shelter (bug hotels) in suitable locations around the site. These can be bought or home-made using natural materials. Making sure they are secure and well positioned is vital.

For inspiration on a home-made bug hotel, check out these websites for some ideas. Reuse some empty toilet roll tubes and cardboard boxes and create a home for your mini beasts!

www.rspb.org.uk head to their Wildlife Garden Ideas section of their website for lots of ideas that you could try.

www.woodlandtrust.org.uk check out their website for how to make bug hotels out of things around our existing garden. Did you know pinecones bunched together make a wonderful environment for Ladybirds? Head to the woodland trust to find out how to make your very own Pinecone Palace.

Benefits

- Increases nesting sites, refuges from predators and overwintering sites for a wide range of invertebrates.

7. Install a water butt



A water butt is used to capture rainfall, which can then be used for watering plants, helping to reduce tap water consumption.

Rainwater collected in water butts is not always clean and can be contaminated with legionella. However, with correct and safe usage water butts are a great addition to your garden.

To reduce the risk of exposure to legionella you must only use the collected water in a watering can and never attach a hose pipe or pressure washer. Using a pump or a hose can generate fine aerosol particles that, when breathed in, can be harmful and should always be avoided.

Benefits

- Reduces tap water consumption, which preserves water resources and can reduce costs.
- Harvested rainwater is much better for plants, flowers, fruit, and vegetables than tap water, which is often treated with chemicals and chlorine
- Helps store water for when there are dry conditions or there is a hose pipe ban

Head to the link...

www.wildlifetrusts.org/find-wildlife-trust - Wildlife Trusts can provide expert advice on specific wildlife friendly actions

www.gardenorganic.org.uk/ - Garden Organic offers advice and support for individuals or groups who want to become involved in organic gardening, including local community groups who want help to set up and run organic community gardens. A great way of meeting likeminded people local to you.

Continued...

Below you will find a table of biodiversity options ranging from super simple to a little more complex. This tool shows just how beneficial a simple task such as adding wildflower to the garden can be.

Option		Housing density suitability			Cost			Level of ongoing maintenance		
		Low	Med	High	Low	Med	High	Low	Med	High
Plants: grassland and flowers										
1	Reduced mowing	•	•		N/A - cost-saving			•		
2	Addition of Yellow-rattle	•	•		•				•	
3	Wildflower enhancement: plug plants	•	•		•	•			•	
4	Re-seed grassland with meadow mix	•	•		•				•	
Plants: trees and shrubs										
5	Plant native wildlife hedge	•	•	•	•				•	
6	Provide vertical planting	•	•	•	•				•	
7	More flowering shrubs and herbaceous plants	•	•	•	•					•
8	Plant container gardens	•	•	•	•				•	•
9	Plant native trees and shrubs	•	•	•	•			•	•	
Pollinators and other invertebrates										
10	Bug hotels and nest boxes for solitary bees	•	•	•	•				•	
11	Leave or plant ivy as a food resource	•	•	•	•				•	
12	Create natural bee nesting sites	•	•		•			•		
13	Create log piles and a loggery	•	•		•			•		
Birds and mammals										
14	Bird nest boxes	•	•	•	•			•	•	
15	Reduced hedgerow cutting	•	•	•	N/A - cost saving			•		
16	Bat boxes	•	•	•	•			•		
17	Hedgehog houses and highways	•	•	•	•				•	
18	Retain areas of scrub	•	•		•			•	•	
General biodiversity										
19	Create pond habitat	•	•		•	•			•	
20	Reduce input of herbicides/pesticides	•	•	•	•					•
21	Green roofs and living walls	•	•	•			•		•	•
Sustainability										
22	Build/ install compost bins	•	•	•	•					•
23	Create vegetable plots	•	•		•					•
24	Install a water butt	•	•	•	•			•		
25	Create rain gardens	•	•	•	•	•		•		
26	Sustainable lighting	•	•	•	•	•		•		

