Biodiversity in your School Grounds

What is biodiversity?

Biodiversity means the variety of life. It includes all plants and animals, their habitats and the factors that link them to each other and their surroundings. It is not restricted to rare and threatened species and habitats but includes the whole of the natural world from the commonplace to the critically endangered.

Why should Biodiversity be protected?

We all have a part to play in safeguarding the Earth’s biodiversity. Therefore action needs to be taken, at both a local and global level, before our biodiversity disappears for good. Increasing biodiversity in your school grounds can make an important contribution to efforts to preserve biodiversity across Manchester and the UK.

The benefits of biodiversity are endless, but include:

- Learning about and enjoying the wildlife of Manchester. This makes an important contribution to our quality of life, health and spiritual well being. School grounds provide an excellent site for students to learn about biodiversity.
- Plants, animals and habitats enrich our everyday lives as they produce the necessary ingredients for all life to exist.
- Without conserving biodiversity, we will pass to our successors a planet that is markedly poorer than the one we were privileged to inherit. Therefore we have a duty and a role of play to ensure that the earth and its environment are protected for generations to come,
- Increased biodiversity can raise environmental awareness in local communities. It has also been shown that improving school grounds can influence children’s values and attitudes towards the wider environment.
- There are ethical grounds for conservation, as many people believe that every species is of value in its own right
Eco-schools is a programme that provides a framework to help schools become more sustainable. There are three levels that your school can work towards: Bronze award, Silver award and Green Flag. Pupil involvement is key to the success of eco-schools.

**Biodiversity is one of the nine eco-schools themes.** However it is important to note that all of the themes are interconnected in some way. For example working on your litter or waste themes will impact positively on biodiversity. Increasing biodiversity will also help with your targets in your school grounds theme.

For more information on eco schools visit their website [www.eco-schools.org.uk](http://www.eco-schools.org.uk) or contact Gemma Lee, Environmental Education Officer at Manchester City Council on 0161 953 2760.

**Curriculum Links**

Understanding and respect for nature can be fostered in children from a very early age. Biodiversity is an essential component of environmental education and can be linked to the national curriculum in many different ways. Your school could try to:

- Include biodiversity in your curriculum, there are clear links to science, maths and geography as well as citizenship, art and English. For example completing a biodiversity audit could develop mapping skills in geography and data analysis skills in maths.

- Consider using an INSET day for training in biodiversity education.

- Explore biodiversity in your school grounds, nearby park or environmental study centre as part of the curriculum.

- Organise a nature day in the school grounds and/or set up a wildlife club at school.

- Join a conservation organisation such as the British Trust for Conservation Volunteers or The Wildlife Trust as a school member.

- Use the classroom to demonstrate good practice for the environment: recycle waste and use water and energy wisely.
GETTING STARTED

Increasing biodiversity step by step

Gather baseline data about the level of biodiversity at your school. The audit at the back of this handout could help to get you started.

Now you have a bit of an idea of what biodiversity exists in your school grounds you can start to decide what area of the grounds you will focus on. What are your goals?

What action will you need to take to reach your goals? For example if your goal is to increase the diversity or number of butterflies that visit your grounds what actions will you need to take to make this happen.

Decide at this stage how you will measure whether or not your actions have been successful.

Decide on timescales. Will you need to fundraise first? Can the work be completed in the current school term?

Designate responsibility for the different actions that are required. Make sure everybody is aware of exactly how they are required to contribute.

Be positive and go for it... put your action plan into place!
By changing a small area in your school grounds into a wildlife garden you will be providing a valuable habitat for local wildlife. The wildlife garden will also be an outdoor classroom where you can discover the natural world and develop your understanding of environmental issues through first hand experience.

Simply planting some native plants and providing attractive conditions for wildlife such as insects and garden birds to shelter and feed will increase the wildlife population.

**Activity and project ideas**

**Hedges, trees and shrubs**
Plant native species of trees, shrubs and hedgerows. These will help to attract a wide range of insects, birds and small mammals that feed on them. Choose species with berries or nectar rich flowers (rowan or guelder rose), and that are characteristic of local semi-natural habitats (birch, oak, ash, alder, elm and willow).
Plant shrubs closely together in groups or as a hedge to provide living space and food for all sorts of wildlife. Native choices include Hawthorn, Blackthorn, Wild rose, Holly, Hazel and Elder.

**Bird and bat boxes**
With bird and bat populations decreasing, making bird and bat boxes is an excellent idea to help our flying friends live and breed. January and February are the ideal times to build the box and use in the spring. Make sure the boxes don’t face the sun and are not exposed to the rain.

**Bird and butterfly feeders**
By providing food for birds and other animals you will help to attract them to your grounds where they can be watched and studied.

Different birds eat different foods in different ways and different places. Provide nuts, seeds, fat and kitchen scraps in feeders, trays and on the ground to allow for the various diets and feeding methods of many species particularly in Winter. Move feeding places occasionally to guard against predators, disease and unwelcome visitors such as rats.

Make a butterfly border of long-flowering, sweet-smelling, sun-loving plants such as Buddleia (butterfly bush). Plant them in a sheltered sunny spot and arrange to have some plants in flower all year round. Moths are attracted to night-scented stocks such as Honeysuckle and Evening Primrose.
**Wet areas**
Water is vital for all living things, providing a source of water in your school grounds will increase the range of plants and animals that can survive there.

**‘Wild’ corners**
Undisturbed ‘wild’ areas where grass and wildflowers grow, can provide valuable shelter and food for wildlife. Damp log piles create an ideal winter home for hibernating frogs, toads and newts.

---

**FUNDING**

**Volvo Eco Adventure Grants**  
*Awards for young environmentalists*  
www.volvocars.co.uk/ecoadventure

This award scheme provides 10 annual grants of £500 for an environmental project run by young people. One of the categories is the Biodiversity Award for a project which contributes to conserving local flora or fauna. All the details are online or call 0207 5935278. Deadline for applications is 16 December 2005

**British Ecological Society**  
*Grants for School Ground Developments*  
http://www.britishecologicalsociety.org/articles/grants/education/EEG/#School_Ground_Developments

The purpose of this grant is to support initiatives to enhance school grounds as ideal places to teach practical ecology. Whether you want to build a school pond or develop a nature reserve a BES grant could help you to get started.  
Suitable for primary and secondary, Value: Up to £1000  
Application deadlines: Sept 30th, Jan 31st and April 30th.  
Download the application from the website.

**B & Q Better Neighbour Grants**
Grants are normally between £50-£500. Available to schools to help get a project up and running. The scheme provides B&Q materials, for example, pond liners, plants, peat-free compost for projects such as a pond/wildlife garden.  
Apply to your local store manager for details

**Ernest Cook Trust Educational Grants**
www.ernestcooktrust.org.uk

Grants range from £100-£300. The ECT does not help with capital costs e.g. digging ponds, constructing paths. However they can help with educational resources such as bug boxes, pond dipping equipment, bat boxes, books on wildlife, weather stations etc. Application details on website  
Email: grants@ernestcooktrust.org.uk Tel: 01285 713 273
Establishing links and finding out where to go for ideas, help and support is an important factor in the success developing your school grounds and increasing biodiversity.

- **Nest box kits** - Mersey Valley Warden Service 0161 8815639

- **Nest boxes, bird feeders, bird food** - Jacobi Jayne & Company 0800 0720130 or your nearest garden centre

- **Wildflower seed and plants** - Landlife Wildflowers 0151 7271819

- **Trees & shrubs** - British Trust for Conservation Volunteers 01302 572200 or your nearest garden centre

- **Tools** - British Trust for Conservation Volunteers 01302 572200 or your nearest garden centre

- **Nets, Field Study accessories, surveying equipment and pond liners** - Envisage 0870 9507222

If you would like to purchase something which isn't listed above, please contact Jon Follows (0161 2341869) or Cath Battersby (0161 2375656) for help.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contact</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Manchester Biodiversity Project</td>
<td><a href="http://www.gmbiodiversity.org.uk/">http://www.gmbiodiversity.org.uk/</a> <a href="mailto:gmeu@tameside.gov.uk">gmeu@tameside.gov.uk</a></td>
<td>The Biodiversity Project aims to bring together individuals and organisations from all sectors of the community to conserve biodiversity across Greater Manchester. They can offer advice and information on wildlife conservation, ecological surveys, habitat creation and management. Will offer specific advice to schools on particular species and grants.</td>
</tr>
</tbody>
</table>
| Manchester City Council Environmental Strategy Team | Jon Follows  
Environmental Strategy Officer  
j.follows@manchester.gov.uk  
[www.wildaboutmanchester.info](http://www.wildaboutmanchester.info) | Can provide support, guidance and information on a range of environmental issues |
| Manchester City Council Environmental Education Officer | Gemma Lee  
Tel: 0161 953 2760  
Email: g.lee1@notes.manchester.gov.uk  
[www.eco-schools.org.uk](http://www.eco-schools.org.uk)  
[www.manchester.gov.uk/education/index.htm](http://www.manchester.gov.uk/education/index.htm) | One to one support for Eco Schools  
Can sometimes help with small scale planting and provide flowers, bulbs and trees.  
Can provide litter pick materials to clean up your school grounds (litter picks, gloves, bags), can also arrange to pick up larger items of rubbish.  
Contact point to order your copy of the Going for Green resource pack for teachers |
| Groundwork School Grounds Development Programme | School Grounds Liaison Officer  
Tel: 0161 237 5656  
Fax: 0161 237 3939 | Main sign-posting organisation for Manchester Schools, offering advice and information about the process and development of school grounds. |
| **Manchester Environmental Education Network (MEEN)** | Raichael Lock  
Tel: 0161 273 8881  
Email: meen@gn.apc.org | Gives support to schools in teaching Education for Sustainable Development. Provide training for teachers, useful contacts and advice on resources. Also support eco-schools work. |
|---|---|---|
| **Parkside Training Centre** | Barbara Stafford or Roy Tattersall  
Tel: 0161 740 3419 | They have a demonstration garden set up so that groups (including schools) can see what different types of trees look like. They have a self guided walk but make sure you call in advance to let them know you are coming. |
| **Red Rose Forest** | Tel: 0161 872 1660  
Email: team@redroseforest.co.uk | Advise on woodland development and can provide trees/wildflowers free of charge for community projects. May have ideas on funding. |
| **British Trust for Conservation Volunteers (BTCV) South Manchester** | Katie Lowry  
Tel: 07740 899539  
www.btcv.org.uk | BTCV South Manchester can offer advice and assistance in schools grounds issues. Mainly help with funding or physical labour using dedicated volunteers. |
| **The National Wildflower Centre - Liverpool** | Tel: 0151 737 1819  
Email: info@landlife.org.uk  
http://www.nwc.org.uk/ | Advise schools on gardening projects involving wildflowers (meadow areas etc). Teacher’s resource pack available for £12.50 (ideas for the classroom). |
| **Manchester City Council Park Warden Service** | South: 0161 998 2117  
Central: 0161 224 2902  
North: 0161 795 2650  
East: 0161 223 8278 | The warden service organise a range of affordable educational activities and events for local schools. Many of these play a key role in developing and fulfilling aspects of the national curriculum. Bug hunts, pond dipping and especially tree/bulb planting are some of the many activities that tie in with the theme of biodiversity |
| **The Wildlife Trust for Lancashire, Manchester and North Merseyside.** | Tel:01772 324129  
Fax: 01772 628849  
Email: lancswt@cix.co.uk  
www.wildlifetrust.org.uk/lancashire/ | Environmental Charity dedicated to conserving all our habitats and species. Also run ‘Wild Watch’ for young environmentalists. Publish a ‘Wildlife Action pack’ with information on promotion biodiversity. |

### USEFUL RESOURCES

<table>
<thead>
<tr>
<th><strong>Organisation</strong></th>
<th><strong>Summary</strong></th>
</tr>
</thead>
</table>
| Wild about Manchester  
http://www.wildaboutmanchester.info/site/ | Manchester’s own biodiversity web site. Links to the biodiversity strategy, education, latest events etc.. |
| **Nature Detectives**  
http://www.naturedetectives.org.uk/ | All the resources you need to discover, survey and monitor biodiversity in your school grounds. Many free resources available online when you register. |
| **English Nature**  
| **Arkive** | 1. [www.arkive.org](http://www.arkive.org)  
2. [www.arkiveeducation.org](http://www.arkiveeducation.org) | 1. Search for your favourite animal or plant and find out whether they are endangered with an excellent separate education resource site  
2. The website features lesson plans, support materials, curriculum links and project ideas |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>rECOrd</strong></td>
<td><a href="http://www.consult-eco.ndirect.co.uk/lrc/educre.htm">www.consult-eco.ndirect.co.uk/lrc/educre.htm</a></td>
<td>This website features many free and photocopiable worksheets – from mini beast hunts to butterfly identification</td>
</tr>
<tr>
<td><strong>Greater Manchester Biodiversity Project</strong></td>
<td><a href="http://www.gmbiodiversity.org.uk/">www.gmbiodiversity.org.uk/</a></td>
<td>This site hosted by Greater Manchester Biodiversity Project gives local information about what’s happening in Greater Manchester and links to local groups</td>
</tr>
<tr>
<td><strong>Natural History Museum: Exploring Biodiversity</strong></td>
<td><a href="http://internt.nhm.ac.uk/eb/index.shtml">http://internt.nhm.ac.uk/eb/index.shtml</a></td>
<td>Lots of interesting information about wildlife and nature conservation from the National History Museum in London. Includes lesson plans and a database to compare areas in the UK by postcode</td>
</tr>
<tr>
<td><strong>Royal Society for the Protection of Birds</strong></td>
<td><a href="http://www.rspb.org.uk">www.rspb.org.uk</a></td>
<td>Information about Garden hedges and other ways to attract birds to your site.</td>
</tr>
<tr>
<td><strong>Tree for all</strong></td>
<td><a href="http://www.treeforall.org.uk/">http://www.treeforall.org.uk/</a></td>
<td>Tree For All is the most ambitious children’s tree-planting project ever launched in the UK, with plans to help plant 12 million trees over the next five years. With your support, Tree For All could give one million children the chance to make a positive difference</td>
</tr>
</tbody>
</table>
| **Woodland Trust** | [http://www.woodland-trust.org.uk](http://www.woodland-trust.org.uk)  
[http://www.wildaboutwoods.org.uk](http://www.wildaboutwoods.org.uk) | The Woodland Trust is the UK’s leading conservation charity dedicated to the protection of our native woodland heritage. A range of online and offline resources for teachers and pupils about trees |

**Developing & Using Environmental Areas in School Grounds (Cleapps Guide L221)**
Free Guide available from Cleapps to all Manchester LEA schools
Information on many topics related to biodiversity: For example bird gardens and bird tables, butterfly gardens, meadows, ponds and trees.
Tel: 01895 251496  Fax/Answerphone: 01895 814372
[www.cleapss.org.uk](http://www.cleapss.org.uk) E-mail: science@cleapss.org.uk

**Enhancing Wildlife in the School Ground**
[http://www.ecoeducation.org.uk/Practical%20files/practical_schoolgrounds.htm](http://www.ecoeducation.org.uk/Practical%20files/practical_schoolgrounds.htm)
Enhancing Wildlife in the School Ground, produced by Gateshead Council, is an excellent guide to developing your school grounds for both educational and wildlife purposes. It provides information that will be useful to both beginners and experts in wildlife gardening for schools. Go to the above website and download the document as a PDF file.

**Growing Schools Garden Resource Pack**
Free resource pack with lesson plans. For example ‘Growing Wildflowers’, ‘Butterfly and Bee Borders’ and ‘Hanging Bird Feeders’.
Visit the website or email growing.schools@dfes.gsi.gov.uk
**Manchester Schools Biodiversity Audit**

<table>
<thead>
<tr>
<th>Name of School</th>
<th>Address</th>
<th>Contact name</th>
<th>Date of Audit</th>
</tr>
</thead>
</table>

### Features for attracting wildlife

<table>
<thead>
<tr>
<th>Feature</th>
<th>Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird box</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird bath</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird feeder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bat box</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log pile</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feature</th>
<th>Size (metres$^2$)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildflower meadow</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

9
<table>
<thead>
<tr>
<th>Plants to attract</th>
<th>Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butterflies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trees</th>
<th>Type of planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Woodlands |
|-----------|------------------|
| This table will apply to you if there are any areas of woodland or small copses of trees on or adjacent to your school grounds. |

<table>
<thead>
<tr>
<th>Size of Woodland</th>
<th>Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership of woodland</td>
<td></td>
</tr>
<tr>
<td>Management of woodland</td>
<td>Squares</td>
</tr>
</tbody>
</table>
Wildlife

<table>
<thead>
<tr>
<th>Species</th>
<th>Where sighted</th>
<th>Month sighted</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any further comments on biodiversity:

Please send your completed audit to
School Grounds Liaison Officer
Groundwork Manchester, Salford and Trafford
Phoenix House, 61 Spear Street
Manchester M1 1DF

Or fax it to 0161 237 3939