# School Wildlife Gardens

## A Teacher's Guide

### Contents

<table>
<thead>
<tr>
<th>SECTION 1 - Introduction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Importance of your School Wildlife Garden</td>
<td>4</td>
</tr>
<tr>
<td>The Benefits of a School Wildlife Garden</td>
<td>5</td>
</tr>
<tr>
<td>A Brief Guide to Creating School Wildlife Gardens</td>
<td>6</td>
</tr>
<tr>
<td>A Maintenance Calendar for your School Wildlife Garden</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 2 - Creation and Maintenance of Habitats in School Wildlife Gardens</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodland Habitats</td>
<td>9</td>
</tr>
<tr>
<td>Meadow Habitats</td>
<td>13</td>
</tr>
<tr>
<td>Pond Habitats</td>
<td>19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 3 - Other Habitats for your School Wildlife Garden</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bog Gardens/Marshes</td>
<td>25</td>
</tr>
<tr>
<td>Log Piles</td>
<td>16</td>
</tr>
<tr>
<td>Birds Tables, Water Baths &amp; Bird Boxes</td>
<td>16</td>
</tr>
<tr>
<td>Stone &amp; Brick Walls</td>
<td>16</td>
</tr>
<tr>
<td>Herb Gardens</td>
<td>16</td>
</tr>
<tr>
<td>Butterfly Gardens</td>
<td>17</td>
</tr>
<tr>
<td>Bat Boxes</td>
<td>17</td>
</tr>
<tr>
<td>Creating a Wormery</td>
<td>17</td>
</tr>
<tr>
<td>Compost Heaps</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 4 - National Curriculum Links with School Wildlife Gardens</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>18</td>
</tr>
<tr>
<td>English</td>
<td>19</td>
</tr>
<tr>
<td>Mathematics</td>
<td>19</td>
</tr>
<tr>
<td>Design &amp; Technology</td>
<td>20</td>
</tr>
<tr>
<td>History</td>
<td>21</td>
</tr>
<tr>
<td>Geography</td>
<td>22</td>
</tr>
<tr>
<td>Modern Foreign Languages</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 5 - Appendices</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources of Funding</td>
<td>23</td>
</tr>
<tr>
<td>Useful Addresses</td>
<td>25</td>
</tr>
</tbody>
</table>
SECTION 1

Introduction

The Importance of Your School Wildlife Garden

School wildlife gardens are gardens that attract wildlife. They can increase the biodiversity of your school grounds, particularly in urban landscapes such as Kensington and Chelsea; and provide a safe and attractive place to learn about wildlife. In addition, they provide tranquil areas that can be used for informal and curriculum activities as well as staff meetings. Wildlife gardens also provide children with first hand experience of the natural world through study and practical care of the garden.

School wildlife gardens are becoming increasingly important refuges for wildlife. Numerous natural habitats are disappearing due to human activities such as pollution and house building, and many once common species are now struggling to survive. The stag beetle, the dormouse and the once common bluebell and house sparrow are all examples of native species that have greatly declined in numbers in recent years largely due to vanishing habitat.

Any type of green space - no matter how small - can be designed specifically to attract wildlife. There is no ideal garden for wildlife and each garden will attract different species depending on the physical and chemical aspects of the garden as well as the gardens and landscape that surround it.

Wildlife gardens can consist of one or several habitats. A habitat in a wildlife garden could be a wood, a pond, a meadow, a bog or a rockery. Within these main habitats, microhabitats can develop, such as a log in a wood that accommodates woodlice and millipedes or a stinging nettle leaf that becomes the host plant of a caterpillar. Thus, school wildlife gardens do not have to be large at all. If your school does not have the space to have a wildlife garden, then look at the smaller areas of your school, such as grass verges or flowerbeds. These can be planted with wild flowers to become a mini-meadow, or with herbs and nettles that attract butterflies. These habitats are still very beneficial to wildlife and are worthy of attention from your school.
The Benefits of a School Wildlife Garden

THE BENEFITS OF SCHOOL WILDLIFE GARDENS
• Great resource for outdoor education & nature clubs
• Curriculum opportunities
• Valuable for wildlife in an urban area
• Gives children opportunities to have direct contact with nature - RBKC has the lowest amount of green-space per head of population
• Celebrate the importance of school grounds on National School Grounds Day, usually the 1st Friday in May
• Regarded positively in OFSTED Inspections

IMPROVING PRACTICAL SKILLS
A wildlife garden in your school can be of enormous benefit to both pupils and staff. All members of the school can become involved from dinner ladies to governors, from grounds maintenance staff to maths teachers. Most important however, is that the pupils are involved from the start. Participation leads to a sense of ownership and pride in children, fostering both interest and concern for the environment. Designing, creating and maintaining a school wildlife garden also enables the development of a wide range of skills and works across the National Curriculum. Children and adults can learn new skills, concepts and ideas in practical circumstances and become more aware of their external environment. The garden can become a community resource involving parents, grandparents and other local relations. Local conservation groups, councillors and media such as local newspapers, TV and radio stations may wish to play a role, and local businesses may offer sponsorship and funding for the garden.

IMPROVING SOCIAL SKILLS
Outdoor education and play serve to enhance a child’s learning; and provide not only educational but also social benefits. The sense of ownership that children gain from being responsible for their wildlife garden can be extremely beneficial and can have a marked effect on children’s attitudes to school, themselves, other people and their surroundings. It may be the first opportunity that a child has had to care for plants and animals in their natural surroundings. A garden encourages a sense of maturity and ownership through joint endeavour and working with the community. In many urban areas involving children in creating areas and landscapes actually reduces vandalism.

THE OUTDOOR CLASSROOM
The addition of a wildlife garden to your school also greatly enriches the study of the National Curriculum and subjects that can be studied in the outdoor environment include science, history, maths and English. A wildlife garden can also be used as an additional classroom and any subject can be studied in the relative calm and quiet gardens can induce. The benefits of having a wildlife garden in your grounds can be manifold for both pupils and staff. Although it may require some effort to get your project off the ground, it will be well worth it.
A Brief Guide To Creating School Wildlife Gardens

1. SELECT AN AREA FOR THE WILDLIFE GARDEN
Wildlife gardens do not have to be large, but select an area that is in a less used part of the school and that can be made safe with fencing to protect both the garden and the children. Ideally, the size should permit a selection of different habitats (pond, grass and trees) along with a suitable area for the children to work in.

2. DISCUSS THE IDEAS WITH TEACHERS, GOVERNORS AND CHILDREN
It is very important that as many people as possible support the idea of a garden and provide practical assistance to the creation of a new garden. It is an opportunity to engage everybody in the school and generate excitement as the project gets underway. It is often useful to establish a garden committee and/or a nature club to oversee the garden’s development and maintenance.

3. INVOLVE THE CHILDREN
The creation of a new garden is an ideal opportunity to involve the children in a range of activities. Initially the older children can help undertake surveys of the other children to find out what features everybody wants. The children can then undertake a design project to incorporate the ideas into the final plan. They can build models of the new garden and how they would like it to look. This is an ideal way of collecting the ideas and helps give the designer the basis to provide the final plan.

4. SEEK DESIGN ADVICE
It is useful to obtain a final drawing and design specification to provide a proper plan of the garden. It is also very important to do a proper survey for utilities and services in the designated area, as excavation work can affect these. Ensure you employ a qualified Landscape Architect with experience in school wildlife gardens and nature conservation. They will be able to produce a specification to contract the construction work out to a suitable garden contractor. The designer should also be able to oversee the construction work and work with the children on the planting and other safe tasks.

5. RESOURCES AND FUNDRAISING
If the school can find the resources to undertake the design work, this makes it considerably easier to attract funding to create the garden. Initially there are many unknowns about the cost, but once you have a design, it is much easier to provide an estimate of how much the materials and work will cost. The school can then use the designs and proposals to seek grants and funding.

There are many charities and organisations that can assist with funding, there may also be local businesses who would like to contribute to their local community. Ask the Ecology Service for advice and assistance, as they have assisted many schools with their construction and creation projects.

6. SELECTING A CONTRACTOR
It is possible to construct the garden with the assistance of your designer and lots of help from the children. However, it is likely that for some of the construction work, you will require a
contractor. It is important that you select a contractor who has experience of working in a school environment. Health and safety is extremely important and the contractor should provide the school with a plan and timetable for their construction work. Ensure that materials are delivered before or after school hours. Make sure you are clear about your requirements to the contractor and, if possible, seek advice from a school that has been through the experience. It is also important to liaise closely with the contractor to ensure good communication about the progress of the project.

7. HEALTH AND SAFETY
As health and safety issues are paramount to the success of this project, contact the Education Department’s health and safety officer and involve them closely. Ensure that the officer makes regular visits to the wildlife garden during construction.

The wildlife area should remain out of bounds when unsupervised, this means that a fence or secure barrier will be required. Ponds are particularly dangerous for children if unsupervised.

8. MAINTENANCE & MANAGEMENT
Although wildlife areas require less management than other more formal areas, maintenance visits are still required. If you use an outside contractor, they should retain responsibility for the garden for the first 12 months, as some plants may require replacement. However, a maintenance plan for watering, weeding and meadow cutting should be established with assistance from the designer.

9. AN EDUCATIONAL RESOURCE
The wildlife garden should provide your school with an excellent resource for both curriculum and informal studies. There are lots of curriculum ideas provided at the end of this pack. The Ecology Service can help with the provision of INSET sessions to encourage your teachers to use the garden with the children.
# A Maintenance Calendar for your School Wildlife Garden

<table>
<thead>
<tr>
<th>JANUARY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree and Shrubs</td>
<td>plant now</td>
</tr>
<tr>
<td>Ponds</td>
<td>prevent the surface from freezing with a ball floating on the water</td>
</tr>
<tr>
<td>Bird Boxes</td>
<td>clean them and put up new ones</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEBRUARY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>provide bird food on tables and in feeders regularly</td>
</tr>
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<table>
<thead>
<tr>
<th>MARCH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond Construction</td>
<td>a good time to start building a new pond</td>
</tr>
<tr>
<td>Birds</td>
<td>keep feeding the birds</td>
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</tbody>
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<table>
<thead>
<tr>
<th>APRIL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ponds</td>
<td>plant pond plants after the last frost</td>
</tr>
<tr>
<td>Wild Flowers</td>
<td>sow wild flower plugs and seedlings in the meadow</td>
</tr>
<tr>
<td>Summer Meadow</td>
<td>cut the summer meadow to about 10 cm</td>
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<thead>
<tr>
<th>MAY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Maintenance</td>
<td>prune trees and shrubs</td>
</tr>
<tr>
<td>Spring Meadow</td>
<td>cut the spring meadow after the seeds have set</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JUNE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond Maintenance</td>
<td>keep a check on pondweed and algae.</td>
</tr>
<tr>
<td>Spring Meadow</td>
<td>cut the spring meadow to about 5 cm</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>JULY</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Spring Meadow</td>
<td>keep cutting the spring meadow until September</td>
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<thead>
<tr>
<th>AUGUST</th>
<th></th>
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<tbody>
<tr>
<td>General Maintenance</td>
<td>make sure someone has responsibility for the garden during the school holidays, watering plants and shrubs during their establishment (first three years) is very important</td>
</tr>
<tr>
<td>Pond</td>
<td>keep the pond topped up with rain water if the level drops</td>
</tr>
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<table>
<thead>
<tr>
<th>SEPTEMBER</th>
<th></th>
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<tbody>
<tr>
<td>Wild Flowers</td>
<td>sow seeds for next years meadow and plant some in the classroom for observation</td>
</tr>
<tr>
<td>Summer Meadow</td>
<td>cut the summer meadow after it has finished flowering</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>OCTOBER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond Maintenance</td>
<td>clear out ponds before male frogs begin hibernation</td>
</tr>
<tr>
<td>Seed Collection</td>
<td>collect seeds from trees and shrubs to grow in the classroom</td>
</tr>
<tr>
<td>Bird Feeding</td>
<td>start feeding birds regularly</td>
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</tbody>
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<thead>
<tr>
<th>NOVEMBER</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Tree Planting</td>
<td>plant trees from late November onwards</td>
</tr>
<tr>
<td>Tree Maintenance</td>
<td>cut diseased and damaged trees and create log piles</td>
</tr>
<tr>
<td>Bat Boxes</td>
<td>clean out boxes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DECEMBER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Planting</td>
<td>plant new trees and shrubs when they are dormant</td>
</tr>
<tr>
<td>Bird Boxes</td>
<td>put up bird boxes</td>
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SECTION 2

Creation and Management of
Habitats in School Wildlife
Gardens

The following section explains how to create and manage the three main habitats of woodland, meadow and pond.

1. Woodland Habitats

Woodland habitats can be created in school gardens with just a few native trees and shrubs providing homes to many insects, birds and mammals, as well as supporting native flowers and shrubs. Fallen dead trees and logs are ideal habitats for minibeasts such as centipedes, woodlice and snails. A layer of fallen leaves can shelter all manner of species from hibernating hedgehogs to spiders and springtails.

CREATION OF A WOODLAND HABITAT

Planting trees in your school ground needs careful preparation and planning. The size of land available is not an important concern as even a small plot of land (i.e. 3 square metres) can be transformed into an effective woodland. The basic factors that will need to be considered are listed below.

1) Soil Type
2) Intended use of the area – for wildlife, education, orchard
3) Boundaries and adjacent buildings – canopy/root spread
4) Overhead or underground services
5) Security and vandalism – young trees may be vulnerable
6) Long term management of the trees

WOODLAND SPECIES

It is best to use native species to attract wildlife, although if your school is multicultural it may be interesting to plant some non-native species in another area of the school grounds. Trees can be purchased from BTCV (see suppliers list in appendix). Trees that are purchased at a height of 60cm will grow faster than taller saplings and are much cheaper in terms of cost.

Good native tree species to use are oak, beech, lime, hornbeam and ash. These are all large growing species. Fast growers include poplar, willow, silver birch, elder and cherry. Alder, birch...
and goat willow provide variety and field maple, guelder rose and crab apple provide colour. Hawthorn and hazel provide berries and nuts for birds and other creatures. Holly also provides berries and some greenery throughout the winter months.

PLANTING TREES
It is best to plant trees in the winter whilst they are dormant. Once you have purchased your trees plant them as soon as possible. Before planting store them in a cool dry shady place with their roots in plastic bags to ensure that they don’t dry out. Throughout planting, you need to treat the roots carefully and keep them covered.

Trees can be planted in rows in a ‘square’ pattern, as this facilitates finding the trees when weeding is needed. Children can draw up a map of the site to decide the best planting design, marking where the trees will be planted. Small trees such as hazel can be planted at 1m apart, but larger trees should be planted at 3m apart to allow a high survival rate and develop spreading lower branches. Wider spacing also allows for the development of woodland flowers and shrubs. It is best to plant trees in groups of 3+ as trees are seldom successful in pairs. Woodland in a school wildlife garden will only need 6-7 trees.

A simple technique to use when planting trees is to dig an L-shaped notch in the ground where the tree is to be planted. Lever the soil up with a spade to create the notch and insert the tree into the notch, taking care not to cram the roots. The trees should be planted to the same depth at which they were growing in the nursery, which is shown by the soil mark on the stem. Make sure the tree stands vertically and pull the spade out without dislodging the tree. Tread down the soil around the tree with your heel to make it firm. A tree guard can be placed around the tree to prevent accidental damage or vandalism for the first few years of its growth. Tree guards are fairly cheap and can be purchased from BTCV.

MAINTENANCE OF TREES
Maintenance of young trees is straightforward and mainly consists of weeding around the newly planted trees in the first few years. Lack of weeding can cause young trees to die as weeds compete with the trees for light, nutrition and water. It is best to keep an area of at least 10cm in diameter of bare earth around newly planted trees.

As the trees mature (after 3-5 years) you can allow woody and herbaceous plants to grow through naturally. Such plants include bluebells, dog’s mercury, and Solomon’s seal.

MAINTENANCE OF WOODLAND HABITAT
Most wooded areas in Britain have traditionally been managed to some extent and your wood
will need a certain degree of management to prevent it from becoming overgrown and unusable both as an education and wildlife resource.

The following techniques are used in woodland management. Please note that this pack only provides a brief guide to these techniques and you should undertake training or employ professional assistance. BTCV are always willing to assist and can provide groups of trained volunteers.

(A) COPPICING
Coppicing is a traditional woodland practice that originally began in order to maximise wood yield. Coppicing involves cutting the tree at the base of the trunk so that the following year several new shoots will grow from the stumps, which in turn are coppiced, another 7-10 years later.

Coppicing is now often used in conservation management, as coppiced woods are rich in wildlife. Hazel is a good tree to coppice as is hawthorn, hornbeam, beech and most other deciduous broad leaf species. Coppicing can begin when the trees reach 5-8 years and your woodland should be sectioned into plots so that not all the trees are being coppiced in the same year.

(B) HEDGE LAYING
Many hedgerows have been destroyed since the 1950’s and have been replaced by more flexible barriers such as fences and walls. Hedges provide a valuable habitat for flowers, birds, insects and other wildlife and a hedge using small growing species such as hawthorn, blackthorn and hazel can create an effective miniature wood. These can easily be incorporated into school wildlife areas. Most hedges are made from planting trees in a row, either single or double file. Hedges are created by first cutting the stems and then bending them onto a wooden stake. This then creates a living barrier.

(C) TREE FELLING
Tree felling should be done between October and March to avoid the bird breeding season. It should be undertaken with professional advice and assistance for larger species. Organisations such as BTCV can assist schools with maintenance and tree removal. Tree felling can be carried out for several reasons including those mentioned below:

- Thinning overstocked and heavily shaded areas to allow the best trees to grow
- To suppress non-native plants such as sycamore if they are out-competing native trees
- To remove falling hazards or prevent the spread of disease

(D) PRUNING
Pruning should be done in spring. Wherever possible, prune little and often. Pruning may be necessary for one of the following reasons:

- To remove diseased or damaged parts so that the tree is kept in a safe and healthy condition
- To improve or maintain the trees shape for aesthetic or practical purposes
- To reduce the overall size of a tree to prevent it from overcrowding the wildlife garden or play area
## Woodland Species

### KEY UPPER LAYER TREES
*(Grow to 70-100m)*
- Ash
- Aspen
- Beech
- Common Alder
- Common Lime
- Crack Willow
- Hornbeam
- Large Leaved Lime
- Oak
- Poplar
- Silver Birch
- White Willow

### KEY LOWER LAYER TREES
*(Grow to 50m)*
- Common Dogwood
- Crab Apple
- Elder
- Field Maple
- Goat Willow
- Guelder Rose
- Hazel
- Holly
- Osier Willow
- Wild Cherry
- Wayfaring Tree

### KEY WOODLAND SHRUBS & FLOOR GROWING PLANTS
- Bluebells
- Bramble
- Broad Leaved Dock
- Dog’s Mercury
- Dog Rose
- Herb-Paris
- Primrose
- Red Campion
- Sweet Violet
- Wood Anemone
- Wood Spurge
- Wood Sorrel

### KEY WOODLAND MAMMALS
- Bats
- Deer
- Dormice
- Fox
- Grey Squirrel
- Hedgehog
- Rabbit
- Shrews
- Voles
- Wood Mice
- Blackbird
- Dunnock
- Finches
- Jay
- Robin
- Sparrowhawk
- Tawny Owl
- Tits
- Wood pigeon
- Woodpeckers

### KEY WOODLAND INVERTEBRATES
- Centipedes
- Harvestmen
- Millipedes
- Slugs
- Snails
- Spiders
- Woodlice
- Worms
- Beetles
- Bugs
- Butterflies
- Crickets
- Flies
- Grasshoppers
- Ladybirds
- Springtails
2. Meadow Habitats

Wild flower meadows are a habitat that has decreased in area in the UK since the advent of intensive farming. Traditional meadows are a mixture of grasses and wild flowers and are fairly easy to recreate within a school landscape as they can occupy a variety of locations exhibiting a range of sun and shade, soil moisture and fertility. The most successful wild flower meadows are usually found in soils of low fertility and as school grounds are generally in this category due to the amount of building work that occurs, they are perhaps an ideal place to encourage a wild flower and grassland habitat.

Mammals and birds tend to use meadows only for food visits or to pass through when moving to another habitat. However you may be lucky enough to see or find evidence that these animals have visited your meadow. Investigating footprints and food remains would make an interesting study to discover which mammals and/or birds utilise your meadow and when they visit.

CREATION OF A MEADOW HABITAT

A successful wild flower meadow can be any size. You can easily create a beautiful meadow flowerbed by planting some typical meadow flowers such as cornflowers, poppies and speedwells in front of a sunny wall. Wild flower meadows do not need much attention; it is only the cutting procedure that needs to be maintained so that the flowers will bloom again the following year.

Wild flowers tend to establish themselves naturally in poor soil so if your school wildlife garden has an area of patchy grass or wasteland then this would be an ideal place to plant a wild flower meadow.

If your soil is fairly well fertilised then you should purchase wild flowers and grasses which can grow on fertilised soil. It is far better to choose seeds and plants that will thrive in the type of soil that you already have than to attempt to change the fertility of the soil.

There are two types of wild flower meadow:

(I) SPRING MEADOW

This meadow is in full flower from spring and is cut back at the end of June after all the flowers have set seed. This is probably the best type of meadow for schools as the plants are in flower before the end of the summer term.

(II) SUMMER MEADOW

This meadow is in full flower from the beginning of July until late September and is a welcoming sight at the start of a new school year.
PLANTING THE MEADOW
It is advisable to draw a plan of the meadow area before planting because you may want to install a path through the meadow or have a grass lawn where pupils can sit and study. You may want to consider seating such as logs, benches or wooden tables.

To prepare the area for sowing it should first be cleared of large weeds, such as dock, thistles and coarse grass. The soil should be dug, forked and finely raked. Remove the topsoil if the soil is very fertile.

To sow your meadow it is best to use a mixture of plugs and seeds. These can be bought from the addresses supplied in the appendix.

Seeds should be sown in early September after the soil has been prepared and can be sown straight into the ground. They can also be planted in pots indoors and kept inside until spring. This can be an interesting classroom activity and can be utilised to study plant growth.

Plugs (seeds which are grown in nurseries and sold as seedlings) can be sown in April. Using plugs can be the most successful way of planting meadows as they are often much hardier than seeds sown directly into the ground. You should not expect too many flowers in the first year, but by the second summer after sowing you should have an attractive wild flower meadow.

MAINTENANCE OF A MEADOW HABITAT
The most important aspect of wild flower meadows is the cutting and mowing regime. It is important to cut back the meadow at particular times of the year and to leave the meadow to grow naturally during other months.

SPRING MEADOW
Spring Meadows should be left uncut until early July when the flowers will have bloomed and set seed. It should then be mown regularly to a height of 5cm until October.

SUMMER MEADOW
Summer Meadows should be mown regularly from April until the end of June to a height of 7.5–10cm. This will prevent coarse grasses becoming dominant. Cutting should cease from June until mid-September to allow the flowers to bloom and set seed.
### Meadow Species

#### KEY MEADOW GRASSES

<table>
<thead>
<tr>
<th>Species</th>
<th>Max. Height</th>
<th>Flowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Bent</td>
<td>70cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Creeping Bent</td>
<td>100cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Red Fescue</td>
<td>60cm</td>
<td>May - June</td>
</tr>
<tr>
<td>Sweet Vernal Grass</td>
<td>50cm</td>
<td>April - July</td>
</tr>
<tr>
<td>Timothy Grass</td>
<td>150cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Yorkshire Fog</td>
<td>100cm</td>
<td>May - Aug</td>
</tr>
</tbody>
</table>

#### KEY MEADOW BULBS

<table>
<thead>
<tr>
<th>Species</th>
<th>Max. Height</th>
<th>Flowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluebell</td>
<td>20cm</td>
<td>April - June</td>
</tr>
<tr>
<td>Snowdrop</td>
<td>20cm</td>
<td>Jan - March</td>
</tr>
<tr>
<td>Wild Daffodil</td>
<td>35cm</td>
<td>March - April</td>
</tr>
</tbody>
</table>

#### KEY MEADOW FLOWERS

<table>
<thead>
<tr>
<th>Species</th>
<th>Max. Height</th>
<th>Flowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird's Foot Trefoil</td>
<td>30cm</td>
<td>May - Sept</td>
</tr>
<tr>
<td>Common Daisy</td>
<td>12cm</td>
<td>Jan - Dec</td>
</tr>
<tr>
<td>Common Knapweed</td>
<td>65cm</td>
<td>July - Sep</td>
</tr>
<tr>
<td>Common Poppy</td>
<td>60cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Cornflower</td>
<td>60cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Cowslip</td>
<td>20cm</td>
<td>April - May</td>
</tr>
<tr>
<td>Creeping/Field Thistle</td>
<td>100cm</td>
<td>July - Sep</td>
</tr>
<tr>
<td>Field Pansy</td>
<td>15cm</td>
<td>April - Oct</td>
</tr>
<tr>
<td>Field Scabious</td>
<td>100cm</td>
<td>July - Sep</td>
</tr>
<tr>
<td>Germander Speedwell</td>
<td>25cm</td>
<td>March - July</td>
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<tr>
<td>Harebell</td>
<td>50cm</td>
<td>July - Sep</td>
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<tr>
<td>Heath Speedwell</td>
<td>15cm</td>
<td>May - Aug</td>
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<tr>
<td>Lady's Bedstraw</td>
<td>100cm</td>
<td>July - Aug</td>
</tr>
<tr>
<td>Meadow Buttercup</td>
<td>100cm</td>
<td>June - July</td>
</tr>
<tr>
<td>Oxeye Daisy</td>
<td>70cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Red Bartsia</td>
<td>50cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Red Campion</td>
<td>80cm</td>
<td>May - July</td>
</tr>
<tr>
<td>Red Clover</td>
<td>60cm</td>
<td>May - Sep</td>
</tr>
<tr>
<td>Shepherd's Purse</td>
<td>40cm</td>
<td>Jan - Dec</td>
</tr>
<tr>
<td>White Campion</td>
<td>100cm</td>
<td>May - Sep</td>
</tr>
<tr>
<td>White Clover</td>
<td>50cm</td>
<td>June - Sep</td>
</tr>
<tr>
<td>Yarrow</td>
<td>60cm</td>
<td>June - Aug</td>
</tr>
<tr>
<td>Yellow Rattle</td>
<td>50cm</td>
<td>May - Sep</td>
</tr>
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</table>

*Wild flower seed mixes are also recommended.*

#### KEY MEADOW INVERTEBRATES

<table>
<thead>
<tr>
<th>Centipedes</th>
<th>Millipedes</th>
<th>Spiders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### KEY MEADOW INSECTS

- **Butterflies:**
  - Common Blue
  - Marbled White
  - Meadow Brown
  - Small & Large Skippers
- **Other:**
  - Crickets
  - Grasshoppers
  - Shield Bugs
Meadow Flowers & Grasses Identification Sheet

Coltsfoot

Dandelion

Garlic mustard

Great willow herb

May weed

Meadow buttercup

Red Campion

White clover

Red clover
Red dead nettle  White dead nettle  Thistle (creeping thistle)

Tufted vetch  Yarrow

Cleavers  Cocksfoot  Common sedge
3. Pond Habitats

Ponds and other watery environments such as bogs and marshes are very valuable habitats for wildlife. Artificial ponds appear to be just as successful in attracting and supporting wildlife as those that have formed naturally. Ponds provide a vast educational opportunity for both formal and informal study. Pond dipping is often a child’s first practical encounter with wildlife and can be very exciting in spring when tadpoles can be seen developing into frogs!

**CREATION OF A POND HABITAT**

There are several aspects that should be considered before creating a pond in a school wildlife garden.

1. **Safety:** The pond should be near a building so that it can be supervised at all times and is also close for study. You may also wish to fence off the pond area, although the enclosed area should be large enough for group study.

2. **Wildlife:** The pond should be built on a piece of land that already has some wildlife value, as animals will colonise the pond more readily. Part of the pond should be tucked into the undergrowth, although try to ensure that trees do not overshadow the pond, as this will limit the amount of sunlight reaching the pond.

3. **Water Source:** The pond should be near a source of water as there will rarely be enough rainfall to balance the loss of water through evaporation, particularly in the summer months. A water butt placed near the pond can be very useful. Tap water is rich in nutrients and may pollute the pond; rainwater is more beneficial.

**POND SIZE**

The maximum pond size for a school pond should be 5m x 3m with a depth of between 0.5 and 1m. Amphibians such as frogs and toads lay their spawn at different depths so create a few ledges in your pond to encourage these animals to breed and provide the school with plenty of tadpoles! The edges of the pond should be sloping so that birds can drink by the pond edges and animals like hedgehogs can climb out if they accidentally take a bath.

**POND DIPPING PLATFORM**

If the wildlife pond will be used for pond dipping, it will need to have at least one accessible hard edge. A wooden platform is the best means of providing a hard edge; this can be raised slightly above and over the pond edge and can be made from reclaimed railway sleepers or decking boards. The platform can be covered with rabbit wire to prevent the wood becoming slippery in wet weather. Wildlife should be allowed to take refuge away from dipping activities in the rest of the pond so do not have dipping boards all round the pond.
DIGGING AND LINING THE POND

- Before digging your pond, mark out the shape with pegs and string and adjust the shape until it is correct.
- Dig an extra 5cm deeper than the planned depth of the pond to allow for lining materials.
- Smooth out the soil on the base and remove any stones or sharp pebbles.
- Line the pond with a 5cm layer of sand and then cover this with geotextile*.
- On top of the geotextile you should place a butyl rubber sheet which should be covered by a further layer of geotextile.
- The pond is now ready for the water. Ideally the pond should be filled with rainwater and this is where your water butt comes in handy! If you have to use even a small amount of tap water you should leave the pond to stand for a week before planting or putting animals in the pond to allow the chemicals to settle out.

**NB:** The dimensions of all liners should be the length and the breadth of the pond and at least twice the depth. You need to extend the liners beyond the edge of the pond to create a natural looking edge. Cover the exposed edges of the liners with soil as butyl rubber decomposes in sunlight.

*Geotextile is a very strong artificial fibre that protects against sharp objects such as tree roots, stones or accidental damage. Geotextile can be quite expensive and the bottom-most layer of geotextile can be replaced with a piece of carpet if preferred.
INTRODUCING PLANTS AND ANIMALS

The best time of year to introduce plants into a pond is spring or early summer. Follow the supplier’s guidelines as to where to plant different species, as some plants such as bogbean grow at the edge of the pond and others such as water lilies grow in the middle of the pond.

A month after you have planted your aquatic flora you can begin to introduce some animal life to the pond. Adding a couple of buckets of mud from a healthy local pond will ensure that the pond has a hearty supply of microscopic invertebrates, eggs and larvae. Other animals such as insects, frogs, toads and birds will naturally colonise the area. Only introduce frogspawn into the pond if you have enough for the tadpoles to eat otherwise they will quickly eat all the invertebrate life and then eat each other.

Fish should not be put into a wildlife pond, as they will quickly eat all the other animal life in the pond.
MAINTENANCE OF A POND HABITAT

Ponds need very little maintenance. The main task is to clear off the surface pond-weed in early spring and autumn and also throughout the summer as and when necessary. Too many weeds prevent sunlight from reaching the bottom of the water and inhibit plant growth. This in turn can deplete oxygen levels making it difficult for animals to live in the pond. The excess pondweed should be left in a pile at the edge of the pond for a week to allow any stray animals to crawl back into the water. It can then be used as fertiliser or placed onto a compost heap. It is important not to clear the pondweed between March and June, as the animals will be breeding.

The water level of the pond should be checked regularly and topped up when necessary. This will need to be done mostly in the summer months and also over the summer vacation when it would be wise to enlist the school caretaker or a local teacher or parent to carry out this task. Perhaps your school could organise a ‘working party’ consisting of local pupils and parents to meet fortnightly to top up the water level and clear the pond of overgrown weed. Remember to use rainwater from the water butt and try to avoid using tap water.

In the autumn months the plants around the pond edge can be cut back and thinned out, as this will encourage new and stronger growth the following year. Any leaves that have fallen from trees into the pond will need to be scooped out with a rake or a net as these will rot and acidify the water.

During the winter the main concern is that the pond does not freeze over and suffocate the pond animals. The easiest way to prevent ice from forming is to keep a ball floating on the surface as this allows the water to move and at least part of the pond will remain ice-free.

POND LEAKS

If the pond is being filled up but the water level seems to be consistently decreasing then it may be that there is a leak in one of the liners. The water line will drop to the line of the leak and the pond needs to be emptied below this level in order to repair the liner. A butyl liner can be repaired with a puncture repair kit and you should paint over the resulting seal with a plastic sealant. However a serious leak will probably mean that the liner needs to be replaced.

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### Pond Species

**KEY WATER PLANTS**
- Bogbean
- Bulrush
- Common Reed
- Fairy Moss
- Flowering Rush
- Greater Pond Sedge
- Water Crowfoot
- Water Lilies
- Water Plantain
- Yellow Flag Iris

**KEY WATER INVERTEBRATES**
- Flatworm
- Freshwater Shrimp
- Freshwater Hoglouse
- Great Pond Snail
- Leech
- Ramshorn Snail
- Water Fleas

**KEY WATER AMPHIBIANS**
- Common Frog
- Common/Smooth Newt
- Common Toad

**KEY WATER INSECTS**
- Damselflies & Larvae
- Dragonflies & Larvae
- Pond Skater
- Water Beetle
- Water Boatman
- Water Cricket
- Water Spider

**KEY WATER BIRDS**
- Coot
- Heron
- Mallard
- Moorhen
Pond Mini-Beasts Identification Sheet
Marsh Plants Identification Sheet

Marsh marigold

Rosebay willowherb

Brooklime

Water plantain

Common spike rush

Flowering rush

Purple loosestrife

Water mint

Yellow flag iris
SECTION 3

Other Habitats for Your School Wildlife Garden

Other Methods to Attract Wildlife to your School Grounds

If your school does not have the space or resources to create a wildlife garden, there are numerous alternatives that will attract wildlife on a smaller scale. Many of the examples listed below can be sited in a small corner or on a small bed of soil by a wall. Alternatively you can incorporate some or all of these methods into your wildlife garden.

(I) BOG GARDENS/MARSHES
The next best thing to having a pond in your school grounds is having a bog garden. This can range from a plot of marshy or waterlogged land to an old sink filled with soil and water. Good plants to use include ragged robin, yellow iris, marsh marigold and a range of sedges and rushes.

(II) LOG PILES
Log piles are a valuable habitat for invertebrates such as spiders, millipedes, centipedes and many insects. Logs should be placed in a pile in partial shade to prevent them drying out, as most invertebrates prefer damp habitats. Log piles are easy to create and require little, if any, maintenance and provide an excellent opportunity for minibeast hunting and animal identification. You should have at least two or three log piles to prevent overuse.

(III) BIRDS TABLES, WATER BATHS & BIRD BOXES
Birds are possibly the most interesting and attractive wildlife that you can attract to your school grounds. A few feeding stations such as bird tables and seed feeders in your school grounds should encourage a range of species, including tits, finches and robins. You should feed birds from November until March using a variety of foods including unsalted peanuts, oats, sunflower seeds, fresh coconut, meat scraps, fat, currants, cheese, mixed bird seed and moistened bread. Remember to place some food on the ground for groundfeeding birds such as blackbirds and thrushes.

You should also provide a water bath such as an upturned dustbin lid so that birds have water to drink, and place the feeders and baths in close proximity to each other. Place both feeder and bath in or near a leafy tree that can be observed easily from one or several school windows. Check that the water baths don’t freeze over in cold weather.

Nest boxes can be placed on trees at a height of 4 - 6 metres, away from too much noise and intrusion. They should be put up in October-November and facing north-east. These should not
be disturbed from February until October, as the birds will be nesting and raising chicks. Clean out the boxes during the winter to prepare them for the new family the following spring.

(IV) STONE OR BRICK WALLS
If you have an old wall in or around your school grounds that does not pose a danger to people, then this will provide a useful home for creeping plants such as ivy and black briony, both of which have considerable wildlife value, providing nectar for insects and berries for birds. You may also find animals such as snails, slugs and beetles living in the cracks of old walls.

(V) HERB GARDEN
A herb garden can be grown in a small space. Many herbs are attractive plants and also appeal to wildlife such as butterflies and bees. A good selection of herbs to plant includes sweet basil, lavender, parsley, oregano, wild strawberry, purple sage, chives, sweet marjoram, lemon thyme, roman chamomile, rosemary, lemon balm, apple mint, marigold and sage.

(VI) BUTTERFLY GARDEN
Butterfly gardens should be situated in a sheltered sunny place ideally against a wall so that butterflies can bask in the sun. You should also provide an undisturbed log pile for hibernating butterflies and moths. A patch of nettles is a necessity in a butterfly garden as butterflies such as the red admiral, peacock, comma and small tortoiseshell lay their eggs on nettles and they are a fine food source for butterflies, caterpillars and other insects.

Caterpillars and butterflies do not always feed from the same plants so your butterfly garden will need to contain a mixture of some of the following species:

<table>
<thead>
<tr>
<th>NECTAR-RICH PLANTS FOR BUTTERFLIES</th>
<th>FOOD PLANTS FOR CATERPILLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aubrieta</td>
<td>Birds-foot Trefoil</td>
</tr>
<tr>
<td>Brambles</td>
<td>Burdock</td>
</tr>
<tr>
<td>Clover</td>
<td>Forget-me-not</td>
</tr>
<tr>
<td>Honeysuckle</td>
<td>Lavender</td>
</tr>
<tr>
<td>Marigold</td>
<td>Marjoram</td>
</tr>
<tr>
<td>Rosemary</td>
<td>Scabious</td>
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<tr>
<td>Sedum spectabile</td>
<td>Sweet William</td>
</tr>
<tr>
<td>Tobacco plant</td>
<td>Traveller’s Joy</td>
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<tr>
<td>Cabbage</td>
<td>Clover</td>
</tr>
<tr>
<td>Dog Violet</td>
<td>Hemp agrimony</td>
</tr>
<tr>
<td>Holly</td>
<td>Ivy</td>
</tr>
<tr>
<td>Lady’s smock</td>
<td>Mignonette</td>
</tr>
<tr>
<td>Nasturtium</td>
<td>Stinging nettle</td>
</tr>
<tr>
<td>Thistles</td>
<td>Grasses</td>
</tr>
</tbody>
</table>
(VII) BAT BOXES
Bats are an excellent indicator of the quality of our environment. Bats are fully protected under the 1981 Wildlife and Countryside Act. Populations are in decline due to pollution, damage to roosts and loss of feeding habitats. To encourage bats to use school grounds you can put up bat boxes in trees. If they are to be used for summer roosts then they should face south and if they are to be used for winter hibernation they should face north. Ideally put a group of three boxes on a tree with one facing south, one facing east and one facing north. Bats generally roost in colonies so make sure you have several trees in close proximity and place three boxes on each one. Do not disturb the boxes until autumn, when you can sweep out any nesting material. Please ensure that the bat boxes are empty before sweeping them out, as it is illegal to disturb roosting bats. If you do find any bats, contact English Nature or the London Bat Group for advice.

(VIII) CREATING A WORMERY
A wormery can be an interesting, educational resource providing young children in particular with a sense of ownership and responsibility, as they are able to feed the worms daily. You can either purchase a ready-made wormery from BTCV (see address in appendix) and education suppliers, or you can make a wormery for the classroom using the following method:

- Layer soil, sand, leaves and compost in a large, clear, plastic bottle with the top cut off and holes punched in the sides. Add a little water and a few worms.
- Cover the top with thin material fixed with a rubber band to stop the worms escaping. Put the wormery somewhere dark and check it daily.
- You should notice that the worms mix up the layers as they feed and move about – just like they do in a compost heap.
- After a few days return the worms to where they came from.

(IX) COMPOST HEAPS
Compost heaps are a natural means of turning vegetation into compost that can be used as an extremely effective fertiliser for your wildlife garden. They also provide a home for many fly and beetle larvae, slugs, snails and woodlice. Hedgehogs visit compost heaps to feed on the slugs and snails and may hibernate in the compost during the winter. You can make a simple compost heap holder by contacting BTCV at the address in the appendix or compost bins can be purchased from garden centres.
SECTION 4

National Curriculum Links with School Wildlife Gardens

For a more detailed guide to projects and topics, please refer to the Ecology Service Environmental Education Pack.

SCIENCE

KEY STAGE 1

1) Find out about the different plants and animals in the local environment
   - Woodland mini-beast hunt
   - Meadow mini-beast hunt
   - Pond dipping
   - Plant and animal identification

2) Identify similarities and differences between local environments and ways in which these affect the animals and plants found there
   - Compare woodland, meadow and pond mini-beasts: where do they live, how do they move in their environment

3) Care for the environment
   - Respect all living things
   - Creatures living in the wild
   - Study pollution and conservation

KEY STAGE 2

1) Ways in which living things and the environment need protection
   - Return creatures to their wild home
   - Don’t drop litter or uproot plants
   - Water pollution

2) Adaptation: how animals and plants are suited to different habitats
   - Adaptations and comparisons of woodland, meadow and pond mini-beasts and plants
   - Fungi
   - Metamorphosis (frogs, butterflies)

3) Food Chains: how food chains show feeding relationships in an ecosystem
   - Woodland food chains
   - Meadow food chains
   - Pond food chains

4) Learning that nearly all food chains start with a green plant
   - Woodland plants
   - Meadow plants
   - Pond plants

5) Learning that micro-organisms exist and that some are beneficial to humans and some are harmful
   - Decomposers and soils
   - Leaf litter
   - Mulching and composting

6) Plant growth is affected by the availability of light and water, and by temperature
   - Growing seeds and plugs in the classroom to plant in the meadow
   - Tree growth

KEY STAGE 3

1) Different habitats support different plants and animals
   - Comparison of animals and plants from different habitats and of different habitats
   - Fungi
   - Metamorphosis (frogs, butterflies)

2) How some organisms are adapted to survive daily and seasonal changes in their habitat
   - Hibernation
   - Leaf fall
   - Nocturnal & diurnal species

28 | SCHOOL WILDLIFE GARDENS - A TEACHER’S GUIDE
### ENGLISH

#### KEY STAGES 1 AND 2

<table>
<thead>
<tr>
<th>Topic</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Speaking and Listening</td>
<td>- Performing drama activities in the wildlife garden&lt;br&gt;- Listening to the sounds found in nature&lt;br&gt;- Learning new words concerning wildlife and the environment&lt;br&gt;- Discovering and reading nature and environmental stories and poems that may contain challenging subject matter to broaden perspectives and extend thinking&lt;br&gt;- Creating poems, prose and stories based on experiences in the wildlife garden</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topic</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Reading</td>
<td>- Study the plants in your wildlife and/or herb garden and see if they are beneficial to industry or to communities&lt;br&gt;- Conservation studies of species and habitats found in your wildlife garden&lt;br&gt;- Pond decomposition&lt;br&gt;- Soil studies&lt;br&gt;- Composting&lt;br&gt;- Water, light and nutrient investigations</td>
</tr>
</tbody>
</table>

#### KEY STAGES 3 AND 4

<table>
<thead>
<tr>
<th>Topic</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Speaking and Listening</td>
<td>- Consider and discuss local, national and international conservation and environmental issues&lt;br&gt;- Read environmental texts from other cultures and traditions. Compare their methods of environmental education and conservation with those that you employ in your wildlife garden&lt;br&gt;- Write to inform others of your wildlife garden; write an article for the local press or for a gardener's newsletter&lt;br&gt;- Take notes from written and oral sources; perhaps invite a professional conservationist to talk about their organisation and environmental policies</td>
</tr>
</tbody>
</table>

3) Certain factors affect the size of populations
- Size of habitat
- Food availability
- Number of animals/plants within the population

4) Nutrition and growth of green plants
- Growing plugs in the classroom to plant in the meadow
- Tree growth
- Photosynthesis

#### KEY STAGE 4

<table>
<thead>
<tr>
<th>Topic</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) How scientific and technological developments benefit or harm individuals and the environment</td>
<td>- Study the plants in your wildlife and/or herb garden and see if they are beneficial to industry or to communities</td>
</tr>
<tr>
<td>2) Relating scientific knowledge and understanding to the care of living things and their environment</td>
<td>- Conservation studies of species and habitats found in your wildlife garden</td>
</tr>
<tr>
<td>3) The role of microbes in the decomposition of organic materials</td>
<td>- Pond decomposition&lt;br&gt;- Soil studies&lt;br&gt;- Composting</td>
</tr>
<tr>
<td>4) Factors that affect the rate of photosynthesis</td>
<td>- Water, light and nutrient investigations</td>
</tr>
</tbody>
</table>
**MATHEMATICS**

**KEY STAGES 1 AND 2**

1) Applying measuring skills in a range of purposeful contexts (Shape, Space and Measure)
   - Measure areas of the garden and set out shaped areas for different uses, i.e. meadow, log pile sites
   - Measure heights of trees and record plant growth

2) Collecting, representing and interpreting data (Handling Data)
   - Counting and measuring plants and animals; make graphs and charts of the results
   - Work out the number of plants/seeds needed to sow your wild flower meadow and calculate the cost

**KEY STAGES 3 AND 4**

1) Explore shape and space through drawing and practical work and develop an understanding of scale (Shape, Space and Measure)
   - Draw scientific diagrams and maps with the correct measurements of the wildlife garden and the various habitats within it.

2) Design a questionnaire or experiment to capture the data needed to follow lines of enquiry and to test hypotheses (Handling Data)
   - Design a questionnaire before the garden is created to acquire data for the planning of the garden and what members of the school would like to use it for
   - Follow the growth of the garden; evaluate whether it is meeting people’s expectations
   - Use your meadow: for example, predicting and tracking how many of the plugs/seeds planted will be successful

3) Constructing appropriate diagrams and graphs
   - Construct diagrams and graphs for the above

**DESIGN & TECHNOLOGY**

**KEY STAGES 1 AND 2**

1) Work with a wide range of materials
   - Design stools, chairs and animal statues from logs for the wildlife area
   - Work with natural materials such as reeds, straw, hay, leaves, twigs, etc
   - Create nature collages and birdfeeders
   - Design your own garden equipment using recycled materials (old tyres, railway sleepers, etc)

2) Relate the way things work to their intended purpose, how materials have been used and if they are effective
   - Discuss thatched roofs, reed beds for sewer maintenance, hedgerow use, dead hedges, fences
   - Consider how rainwater can be collected from your school roof and run directly into your wildlife pond

**KEY STAGE 3**

1) Judging a technological product in terms of its impact on the environment
   - Discuss the effects that washing up liquid and other detergents have on the environment (perhaps in relation to your wildlife pond)
   - Consider your school’s water system, and whether you could construct an alternative and ecologically friendly school water system

2) Consider the aesthetics, function, safety, reliability and cost of designs
   - Consider all the above factors when planning and landscaping your wildlife garden
1) Recognise that moral, economic, social, cultural and environmental issues can make conflicting demands on a design

2) Judge the quality of a product in terms of whether it is an appropriate use of resources

• Some of these factors should relate directly to the creation of your wildlife garden.

• How much money have you spent on your school wildlife garden, could the school have used this money in a more economic manner and on a different project?

• How has the wildlife garden benefited the school?

• Have the products that you have designed for the wildlife garden been environmentally and economically sustainable?

HISTORY

KEY STAGES 1 AND 2

1) Studying life in town and country

• Consider which animals and plants would have been found across the ages and which have survived into the present day

• Consider how the Romans, Anglo-Saxons and Vikings would have grown their food, find out if their herb gardens were similar to those in your school

2) Consider the impact of industrialisation

• Compare the gardening tools that were used in the past with the tools you use in your wildlife garden

• Consider the impact of industrialisation on air pollution, particularly if your school is near any factories or railway stations

3) Studying the history of your local environment

• Discover the history of your schools site and grounds, including the wildlife garden

• Research the history of your local parks, woodlands and other green spaces, whether these are protected, for how long they have been protected, what were they originally used for

KEY STAGE 3

1) Learning about changes in town and countryside

• Investigate different techniques used in traditional countryside management i.e.: coppicing, haymaking, harvesting

• Understand the effects of countryside management on wildlife and apply these to your school wildlife garden

KEY STAGE 4

1) Key events and developments that occurred during the periods specified by the GCSE syllabus

• Discover if there were any key events and developments that have occurred in your school grounds or your local green space e.g. when and in what circumstances Holland House and its grounds opened for public access

2) History through a range of sources of information, including buildings and sites

• Investigate the history of the site that your school was built upon

• Investigate the history of the species in your wildlife garden
**GEOGRAPHY**

**KEY STAGES 1 AND 2**

1) Learning how people affect the environment and how and why people seek to manage and sustain their environment

- Discuss how you affect your environment and look at ways of managing your wildlife garden to attract more wildlife

2) Studying weather conditions

- Keep a chart of the weather over a certain time period, observing how changes in weather affect plant growth and animal behaviour in your wildlife garden

**KEY STAGE 3**

1) Learn about the characteristics of one type of vegetation and how that type of vegetation is related to climate, soil and human activity

- Investigate the water supply to your wildlife garden, how often you have to top up the pond, water the meadow, etc

2) Study the supply of water and its environmental implications

- Measure the amount of rainfall in your school grounds; compare with other regions in the UK

**KEY STAGE 4**

1) Develop a sense of place and an appreciation of the environment

- Create a ‘wildlife garden committee’ whose members are responsible for overseeing the development and maintenance of the wildlife garden

- Discuss how people of different countries and cultures work with and appreciate the environment

2) Study of the interrelationships between people and the environment

- Design a questionnaire that investigates how people in your locality interrelate with the environment

- Investigate how the pupils at your school relate to their local environment, including the wildlife garden

**MODERN FOREIGN LANGUAGES**

**KEY STAGES 1 AND 2**

1) Learning new words

- Name and draw species in your wildlife garden using a foreign language

2) Speaking and Writing

- Write and read aloud simple nature stories in a foreign language

**KEY STAGES 3 AND 4**

1) Study foreign towns, people, places and customs

- Research conservation management techniques used in other countries that could be used in your wildlife garden

- Investigate local gardening/environmental customs

- Study events such as ‘World Wetlands Day’ and ‘International Dawn Chorus Day’; and how these events are celebrated throughout the world

2) Study world events

- Aim to involve your school in these international events
SECTION 5

Appendices

1. Sources of Funding

DEFRA: DEPARTMENT OF THE ENVIRONMENT, FOOD AND RURAL AFFAIRS
  • Single Regeneration Budget
  • Local Agenda 21
Contact Telephone Number: 0845 933 5577

DFES: DEPARTMENT FOR EDUCATION AND SKILLS
  • Schools Renewal Challenge Fund
  • Grants for Education Support & Training
Contact Telephone Number: 020 8854 8888

ENGLISH NATURE
Devon House, 12-15 Dartmouth Street
Queen Anne’s Gate
London SW1 9BL
Contact Telephone Number: 020 7340 4880

GREATER LONDON AUTHORITY
Environmental Strategy Directorate
City Hall
The Queens Walk
London SE1 2AA
Contact Telephone Number: 020 7983 4000

ROYAL BOROUGH OF KENSINGTON AND CHELSEA
Environmental Services Strategy Unit - Contact Telephone Number: 020 7341 5173
Leisure Services Ecology Service - Contact Telephone Number: 020 7471 9802
Professional Development Centre- Contact Telephone Number: 020 7727 3509

NATIONAL LOTTERY
Sports: Contact Telephone Number: 0845 7649 649
Arts: Contact Telephone Number: 020 7333 0100
Heritage: Contact Telephone Number: 020 7591 6044

GRANT MAKING TRUSTS
National, Regional & Local initiatives. Find out more at your regional Charity Commission
Centre, your local library or contact the Ecology Service

LANDFILL TAX
Within a 10 mile radius. Contact your LA or ENTRUST, an agency which was set up in 1996 to
oversee this tax which is levied against tonnage of landfill.

SPONSORSHIP
Contact local, regional, national or international businesses/industries approx. 2 months before
the end of the financial year.

For a current fact-sheet full of information on obtaining grants and awards for creating and
maintaining school wildlife gardens and your school grounds in general please contact BTCV
Head Office at the address listed in the appendix.
2. Useful Addresses

There are organisations across London that can provide professional help, practical services and advice on all aspects of wildlife gardening from creation, maintenance and educational use. Health and safety is also an important concern when creating changes to school grounds and these issues should be discussed with the Education Department.

PRACTICAL ASSISTANCE

BRITISH TRUST FOR CONSERVATION VOLUNTEERS (BCTV)
80 York Way
London N1 9AG
Tel: 020 7278 4923
Help to create and maintain wildlife areas at low cost. They set their schedule six months in advance so it is important to plan ahead. Groups have a supervisor and first aider and bring their own tools.

BTCV RETAIL & SUPPLIES
Conservation Centre
Balby Road
Doncaster DN4 0RH
Tel: 01302 572236

CHELSEA PHYSIC GARDEN
66 Royal Hospital Road
London SW3 4HS
Tel: 020 7352 5646
Provide advice about plants. Sell plants and seeds on Wednesday and Sunday afternoons (April-October)

KENNINGTON AND CHELSEA CONSERVATION VOLUNTEERS
C/o Holland Park Ecology Centre
Old Stable Yard
Ilchester Place
London W8 6LU
Tel: 020 7471 9802/9
Local volunteer group available for small-scale creation and maintenance projects with schools

LONDON CONSERVATION SERVICES
C/o London Wildlife Trust
Harling House
47-51 Great Suffolk Street
London SE1 0BS
Tel: 020 7261 0447
Provide free consultation service for schools on wildlife areas. Able to provide wildlife area creation, improvement and maintenance services at competitive prices.

LONDON WILDLIFE TRUST GARDEN CENTRE
28 Marsden Road
London SE15 4EE
Tel: 020 7252 9186
Provide excellent advice on what to do, how to do it and when! Also provide locally grown plants, trees and shrubs

LOCAL HELP AND ADVICE

GROUNDWORK WEST LONDON
214 Goldhawk Road
London W12 9NX
Tel: 020 8743 3040
Provide advice and project management for creating and maintaining school grounds. An Education Officer is available for INSET and environmental activities.

HOLLAND PARK ECOLOGY CENTRE
Old Stable Yard
Ilchester Place
London W8 6LU
Tel: 020 7471 9802/9
Provide advice on creating, maintaining and using wildlife areas. Produce environmental education packs and activity sheets.

LEARNING THROUGH LANDSCAPES
C/o Greenwich Curriculum Centre
77 Bexley Road
London SE9 2PE
Tel: 020 8850 3112
Offer advice and maintain a database of contacts for each borough. Produce publication and activity guides.

LONDON WILDLIFE TRUST
Harling House
47-51 Great Suffolk Street
London SE1 0BS
Tel: 020 7261 0447
Provide advice on creating, maintaining and using wildlife areas. Produce an interactive teaching package for developing school grounds.

HDRA THE ORGANIC ORGANISATION
HDRA Organic Gardens for Schools
Ruton Organic Gardens
Coventry, Warks CV8 3LG
Tel: 024 7630 8238
Practical advice on organic vegetable gardening. Run a schools network and produce a regular newsletter, posters and other educational material.

TEACHER TRAINING
Holland Park Ecology Service can provide tailor made INSET sessions for design and management of wildlife areas, and using school grounds for environmental education. Chelsea Physic Garden, London Wildlife Trust and Groundwork West London can also provide INSET.
## School Wildlife Gardens
### A Teacher's Guide

**Evaluation Form**

Please photocopy this sheet, complete your comments about this teacher's guide and return it to:

**The Ecology Centre, RBKC Ecology Service,**
**The Old Stable Yard, Ilchester Place, London W8 6LU.**

Thank you for your feedback

1. **Was the Teacher's Guide relevant to your school?**

2. **How well was the information presented?**

3. **How useful were the identification sheets?**

4. **Was there any information that you would have liked to be included?**

5. **How easy was it to use this pack?**

6. **Do you have any other suggestions on how the pack could have been improved?**

### Please complete your details:

- **Your name:**
- **Name of Science Co-ordinator:**
- **Name of Geography Co-ordinator:**
- **Address of School:**
- **Telephone:**
- **Fax:**
- **E.Mail:**