



Lesson 4: Design a Wildlife Garden

Teaching Instructions

Learning Outcomes

- Communicate: take part in conversation, share ideas and information.
- Improve their understanding of the needs of living organisms, conservation and biodiversity.
- Explore ways to represent ideas and information as a plan.
- Outdoor teaching provides a real-world context for learning, supports emotional and physical well-being, impacts positively on self-esteem and increases knowledge of and care for the natural environment.

Required Resources

Plain paper (A3 or larger)

Coloured pencils, felt pens

Access to computers and the internet for researching wildlife gardens.

Preparation

Arrange the desks for group work (2-4 people per group)

Notes

Lesson duration: We would recommend spending 120 – 180 minutes. You may want to split the activities into a series of lessons.

*** Buglife has provided notes, at the end of this lesson, to help you with the essential features of a wildlife garden.**



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Teaching Plan

Activity 1 - Discussion

Start the lesson by asking the children what we mean by a wildlife garden. Can a conventional garden be a wildlife garden? Why do we need to create wildlife gardens? (natural habitats declining). What wildlife would use the garden? What would the wildlife require from the garden? Food, water, shelter – and how would the features of the garden meet these needs?

Activity 2 - Design a Wildlife Garden

Ask the children to research what makes a good wildlife garden using books and the internet and to discuss, in their groups, what they want to include in their garden. Will it be solely for wildlife or will they include elements for the humans as well?

They should then make a plan of the garden, labelling the different features.

Activity 3 - Presenting the wildlife garden plans

Each group should then present their wildlife garden plans to the class, explaining their choices for the different elements of the garden.

Lesson extension

If you have a wildlife garden in the school grounds, you may like to make a bee or bug hotel to put in it – see lesson 3. If you do not have a wildlife garden you may like to discuss with the children how they could help wildlife on a small scale – tubs of flowers, window boxes, a bird bath and feeders. Maybe you could grow some flowers that will attract bees and butterflies into the school grounds.



Notes to help you create a Wildlife Garden



Creating a wildlife garden is easier than you think and lots of fun you will soon be attracting wildlife into your garden.

Think about the site

Ideally you don't want to create the garden in an area of very dense shade. Plants will struggle to survive and insects prefer a sunnier area so they can bask in the sun. Equally, a site that is bone dry and baked by the sun all day will also be difficult to establish. You are looking for something in between; some sunny areas and some areas which are in more shade and damp. Don't try and fit too much into a small space. Look at the space you have and decide what you can do well with the budget you have.

Look at what is there already

Try to work with what you have already. Keep as many trees as possible and remember that before removing any tree, check that it does not have a preservation order on it. Hedges provide shelter and food and will help to define the wildlife area and are much more wildlife friendly than a fence. If you want to plant a hedge, try to use native species such as hawthorn, holly, hazel and elder.

Water

If you have a pond, you are almost guaranteed to attract wildlife, whether it's birds drinking and bathing, or frogs, newts and toads looking for somewhere to lay their eggs, or dragonflies hunting. Try to make the pond as big as the site will allow. Ideally it should have three areas:



© Nowis



Notes to help you create a Wildlife Garden

- an area of deep water, where creatures can survive the winter.
- a beach area, where the water is very shallow and birds can bathe and other animals can crawl out.
- a shelf round the edge of the pond where you can put pots of aquatic plants.

Below are some suggestions of plants you can use:

Marginals

Place marginals on the shelf or in shallower water. Many provide nectar and those that are tall, provide a perch for hunting dragonflies and a means for dragonfly larvae to climb out of the pond.



Marsh marigold (*Caltha palustris*)
© Dr Chris Gibson



Yellow flag iris (*Iris pseudacorus*)
© Fungus Guy



Water mint (*Mentha aquatica*)
© Dr Chris Gibson

Other marginals to think about:

Lychnis flos-cuculi - Ragged robin
Phragmites australis – Common reed



Notes to help you create a Wildlife Garden

Oxygenators

Oxygenators are very important to keep the pond healthy and help prevent problems with algae.



Hornwort (*Ceratophyllum demersum*)
© Bernd Haynold

Water lilies

Check how large they can grow; there are some smaller varieties.

To help prevent problems with blanket weed, try not to top the pond up with tap water when water levels are low. It will probably make the problem worse. You can fish it out with a rake but leave the weed on the side for a day or two to allow any creatures, time to crawl back into the pond. Don't add fish to your pond; some species will eat the insect larvae and tadpoles.

There are of course many other plants to choose from but check how fast they will grow and whether they can become invasive.

You could install a water butt to collect rainwater.



Notes to help you create a Wildlife Garden

Plants

There are hundreds of plants to choose from but if you want to attract wildlife to your garden you should try to choose native species which are suited to your local area. Most people don't have room for a wildflower meadow but if you do, there are companies that can supply you with seed mixtures for you to create your own meadow. For a smaller area it is probably easier to plant small plants directly into the soil or grass. Wildflower plants are widely available but check they are from a reputable source and not taken from the wild. You can of course grow your plants from seed. Below is a list of possible plants:

Wildflower Plants

Primrose – *Primula vulgaris*

Lesser celandine – *Ranunculus ficaria*

Dog rose – *Rosa canina*

Ox-eye daisy – *Leucanthemum vulgare*

Foxglove – *Digitalis purpurea*

Yarrow – *Achillea millefolium*

Greater knapweed – *Centaurea scabiosa*

Ragged robin – *Lychnis flos-cuculi*

Teasel - *Dipsacus fullonum*

Honeysuckle – *Lonicera periclymenum*

Ivy – *Hedera helix*



Lesser celandine
© Dr Chris Gibson



Greater knapweed
© Dr Chris Gibson



Notes to help you create a Wildlife Garden

If your garden is more conventional, with beds and borders, you can still attract plenty of wildlife. Below is a list of garden plants which are particularly attractive to insects:

Cultivated plants

Hellebores – *Helleborus orientalis*

Catmint – *Nepeta* cultivars

Cone flower – *Echinacea purpurea*

Hemp agrimony – *Eupatorium cannabinum*

Hyssop – *Hyssopus officinalis*

Lavender – *Lavandula* sp.

Fennel – *Foeniculum vulgare*

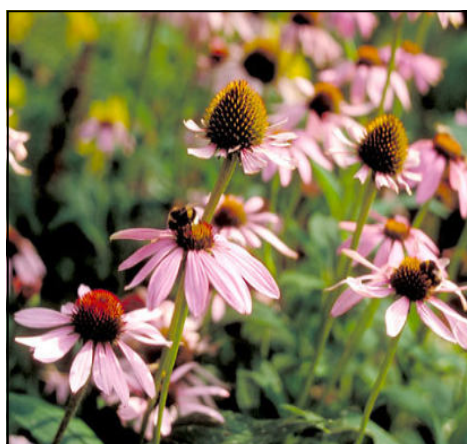
Sage – *Salvia officinalis*

Rosemary – *Rosmarinus officinalis*

Lungwort – *Pulmonaria officinalis*

Sea holly – *Eryngium giganteum/ alpinum*

Sedum – *Sedum spectabile*



Cone flower
© Dr Chris Gibson



Notes to help you create a Wildlife Garden

Wild areas

Try to leave an area of the garden slightly wilder, leaving brambles (a good food source and cover) and nettles (an important food source for the caterpillars of several butterflies) to grow. Maybe let an area of grass grow long to provide cover for insects and amphibians. Don't be in a hurry to cut down plants in the autumn; leave the old flowers stems to ensure seeds have been dispersed and the stems may also provide shelter for over-wintering insects. Some plants, such as teasel, provide valuable food in the form of seeds, for birds. Plants can be tidied up, if necessary, in the following spring.

Dead wood piles for beetles

A wood pile or a group of large stones will provide moist cover for beetles and woodlice. You can also make homes for bugs to shelter in.



Platycerus caraboides
© Roger Key

Make a bee hotel and a bug home

See Lesson 3 for instructions.

