

Creating a Wildflower Patch

Summary:

Creating a wildflower patch is a wonderful long-term project that you can do to get your learners engaged with their natural environment as well as to learn about wildlife and biodiversity. It is also a beautiful asset to a school property, adding colour and vibrancy that can be enjoyed by both wildlife and people! It is a great way of helping young people to feel like they can make a positive difference to support wildlife.

This activity sheet is aimed at educators, to provide you with information and guidance so that you can lead this activity with your learners.

Key Stage / Age group: It can be easily tailored to any age group - the links below are from the <u>National Curriculum for England</u>.

National Curriculum links (Primary):

KS1 & KS2 - Science

Working Scientifically - please see National Curriculum Guidance for working scientifically objectives

Year 1:

- Plants: identify and name a variety of common wild and garden plants.
- Seasonal Changes: observe changes across the four seasons

Year 2:

- Living things and their habitats: identify that most living things live in habitats to which they are suited
 and describe how different habitats provide for the basic needs of different kinds of animals and plants
 and how they depend on each other; identify and name a variety of plants and animals in their
 habitats including mirror habitats.
- Plants: observe and describe how seeds and bulbs grow into mature plants; find out and describe how plants need water light and a suitable temperature to grow and stay healthy.

Year 3:

- Plants: explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant.
- Rocks: recognise that soils are made from rocks and organic matter

Year 4:

• Living things and their habitats: recognise that living things can be grouped in a variety of ways; explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment; recognise that environments can change and that this can sometimes pose dangers to living things.

Year 5:

• Living things and their habitats: describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird; describe the life process of reproduction in some plants and animals.

Year 6:

• Living things and their habitats: describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences including microorganisms, plants and animals; give reasons for classifying plants and animals based on specific characteristics.

KS1 & KS2 Geography:

Geographical skills and fieldwork:

Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment (KS1)

Use fieldwork to observe, measure, record and present the human and physical features i the local area using a range of methods, including sketch maps, plans and graphs and digital technologies (KS2)

KS1 & KS2 Design and Technology:

Make: Select from and use a range of tools and equipment to perform practical tasks

KS1 &B KS2 English

There is a fabulous range of books both fiction and nonfiction which can be used to support the growing of wildflowers in your school. Among a wide selection these could include: The Extraordinary Gardener, Sam Broughton, The Secret Sky Garden, Linda Sara and Fiona Lumbers; What if there were no more bees, Suzanne Slade.

Time needed: This is an ongoing activity that can be done in small chunks of time over the course of a longer period.

Location: Anywhere with soil and light!

Activity links:

We recommend using this activity in conjunction with our <u>BioBlitz activity</u> so that learners can track how the wildflower patch is attracting wildlife. There is nothing more motivating and empowering than seeing that you can have a positive impact!

Before you start:

Importance of wildflower meadows

Wildflower meadows act as feeding and nesting sites for many insects, birds, and small animals. Since the 1930s, we have lost 99% of our wildflower meadows in the UK, and those which are left are fragmented. These habitats are vital for the health of our ecosystems -and they impact humans too. About 35% of the world's crops need insects to pollinate them, so when we lose wildflower meadows, we not only lose insects, but also many of the food crops that we rely on!

'British wildflowers are under threat and therefore so are the pollinators they feed. Not only is it heartbreaking to lose the beauty and colour these native flowers give the UK landscape, but the plight of pollinators has a very real impact on the food we eat ourselves.'

Royal Botanic Gardens, Kew Director, Richard Deverell

By planting wildflowers, we are supporting bees and other pollinating insects which are increasingly in decline. It is not only these insects that are threatened however, as when insect numbers decline, their predators also struggle. Hedgehogs, bats, and birds are just some of the types of wildlife that wildflower meadows support by supplying food (insects) and safe nesting sites.

When to sow seeds?

You can plant a wildflower patch in either March or April or in September, but often early Autumn will give best results as many wildflower seeds need to be planted before the winter in order to germinate in Spring. If you have heavy soil which often gets waterlogged, however, it may be best to sow seeds in the Spring so that they don't rot with waterlogging over time.

Where to plant your wildflower patch?

Ideally, choose a location that is open and gets sunshine for most of the day. You can plant a wildflower patch on flat or sloping land, and can plant on a large or small area. If you can, choose an area as large as possible, so that you can grow a larger variety of flowers which will support more wildlife!

What to plant?

There are 2 types of wildflower seeds/plugs/bulbs that can be planted (Perennial or Annuals). Annuals will produce quick growing blooms which tend to be colourful but over a shorter period than perennials. Wildflowers weather they are perennial and annual grow better on poor soil. Why because good soil encourages grasses that outcompete wildflowers - The development of a wildflower area is something that takes time and below we explore some

of the key elements you will need to consider.

We also believe that management and not stripping off the top soil is the correct approach - There are two types of seeds

- Annual wildflowers short growing season Instant colour You should leave to turn to seed then manage through cutting. May reappear.
- Perennial wildflowers will need to planted as either seed or plugs and with luck will return -Grass management is key and OPM can advise and produce plan for your area

Some great annual seed mixes to choose include:

- Cornflower (Centaurea cyanus)
- Corn poppy (Papaver rhoeas)
- Corn marigold (Glebionis segetum)
- Corncockle (Agrostemma githago)
- Barley and wheat seed will add a nice visual touch to the patch.



Some great perennial seed mixes to choose include:

- Birds-foot trefoil (Lotus corniculatus)
- Common sorrel (Rumex acetosa)
- Cowslip (Primula veris)
- Field scabious hoary (Knautia arvensis)
- Hoary plantain (Plantago media)
- Greater knapweed (Centaurea scabiosa)
- Common knapweed (Centaurea scabiosa)
- Lady's bedstraw (Galium verum)
- Meadow buttercup (Ranunculus acris)
- Ox-eye daisy (Leucanthemum vulgare)
- Red clover (Trifolium pratense)
- Wild carrot (Daucus carota)
- Yarrow (Achillea millefolium)
- A range of grasses (not lawn grasses!) such as bents (Agrostis spp.), fescues (Festuca spp.) and crested dogstail (Cynosurus cristatus).





See this link for Great UK based company which native seeds and plugs

What do we need to do?

1. Prepare the patch

- The most important thing to do when creating a wildflower meadow is to get rid of as much grass as possible from the area you want to convert. This is because grasses will compete with the wildflowers and generally take over the area faster than wildflowers can.
- We believe this can be done by scarifying the grass in Autumn and then planting with yellow rattle seed/ plug
- We believe it is better to let the area develop naturally with regular cutting and seed and plug planting
 OPM will advise and manage where appropriate

2. Suppress weeds

- Firstly you will need to rake the soil so that it resembles breadcrumbs.
- Then you want to remove any weeds by digging them up and by suppressing them with black plastic or weed control fabric. If you have lots of plants such as dock and nettle on your patch, this process of covering the soil could take up to a year to be effective in suppressing the plants.

3. Sow seeds

- If you have scarified the area in the autumn then sowing seeds will be appropriate. Sow seeds evenly ensuring they are in contact with the soil Ensure that they are kept moist in dry periods and Net if possible. Make a note of what has been planted.
- You can also plant plugs in spring/summer (OPM can Advise) and in Autumn bulbs All wildflowers should by native varieties and also be (Damp/grassland/woodland/clay). OPM can advise

4. Water & patience!

- Water the area well, and continue to water until the seeds germinate. Once they sprout, they should be okay without regular watering.
- Make sure the area remains as undisturbed as possible perhaps get some students to monitor the area and let everyone else know where and what you have planted.

5. Watch your wildflower patch evolve & enjoy the biodiversity!

- Your meadow should evolve each year and become more and more species-rich. Enjoy watching the different species visiting over time.
- Let us know how you get on! We would love to see photos and hear your wildflower meadow story.
 We also have <u>BioBlitz sheets</u> which you can print off from our website and use to track the
 biodiversity of your wildflower patch. Fill it in each year to see how the area progresses and what
 wildlife it is supporting!
- Wildlife to look out for: grasshoppers, bees, butterflies, birds, bats, spiders, millipedes, and so much more!

6. Aftercare

- In midsummer during a hot period in the first growing season, cut the plants down and leave them on the ground for 2 days so that the seeds fall into the soil. Then remove the dried plant matter.
- In subsequent years, it is best to not mow the area from early April to late July, August or even
 early September, and to vary the timing of cutting each year so that you don't end up with one
 type of plant dominating the area. Make sure that if you're mowing in July, you leave an uncut
 area for grasshoppers and their nymphs to use as refuge, as they are most vulnerable at this
 time.
- During dry weather, cut the hay with a scythe or grass shears, and leave the plant matter on the ground for up to a week so that the seeds can drop to the ground. You can then compost the plant material that you remove.
- Mow the area a few more times during Autumn and then again in early Spring if it needs it. You may also want to look out for any nettles, thistles or docks which have managed to find their way back, and remove those by hand.
- Additional sowings may be required in the first few years to fill in spaces or you could wait for them to naturally fill each year when plants self-seed.



Image from: https://www.vulcantermite.com/education-and-prevention/how-bees-help-garden-flowers/

Additional Information:

https://www.kew.org/read-and-watch/meadows-matter#:~:text=Why%20do%20meadows%20meadows%20meadows%20provide%20shelter,part%20in%20supporting%20the%20ecosystem.

pace-

https://www.nationaltrust.org.uk/giants-causeway/features/meadow-musings---why-are-wildf lowers-so-important

https://www.forestresearch.gov.uk/tools-and-resources/fthr/urban-regeneration-and-greens partnership/greenspace-in-practice/benefits-of-greenspace/wildflower-meadow-habit ats/

https://www.bumblebeeconservation.org/convert-lawn-meadow/#:~:text=The%20most%20important%20thing%20to,blank%20canvas%20to%20work%20from.

https://www.rhs.org.uk/lawns/wildflower-meadow-establishment

https://www.rspb.org.uk/get-involved/activities/nature-on-your-doorstep/garden-activities/c reate-a-wildflower-meadow/

https://www.wildlifetrusts.org/actions/how-grow-wild-patch-or-mini-meadow

https://www.rhs.org.uk/lawns/wildflower-meadow-maintenance