How To: Create a bed of annual flowers for wildlife









Photos: Helen Bostock

Sowing annuals is easy and rewarding, providing a quick punch of colour in the garden and a mass of flowers. Put a little thought into which ones to grow and you can create a summer-long feast for pollinating insects. Sow a small patch to fill a gap or go big with a whole border. Choose from individual flowers or ready-prepared seed mixes. There is a group of rare and beautiful cornfield annuals that are perfect for annual beds.

Target species

The most obvious wildlife you will attract are pollinating insects. There are hundreds of species of bees and wasps (Hymenoptera), flies (Diptera), beetles (Coleoptera), butterflies and moths (Lepidoptera). Aphids (Aphididae), hoverfly larvae, ladybird larvae and true bugs (Hemiptera) can be found on the plant stems and leaves. See our web pages for more on these groups. Seed-eating birds may take seed of flowers such as sunflowers and cornflowers.

How to do it

- Clear a patch of ground (the sunnier the better), removing weeds and unwanted vegetation by hand.
- Rake the soil level, taking out any larger stones.
- You can scatter your seed by hand (this is called 'broadcast sowing') and works well for seed mixes, especially if thoroughly mixed with some dry sawdust so you can see where you have sown.
- Alternatively sow in rows. This is advisable when you have a lot of weed seeds in the soil as it helps
- to distinguish the annuals you did sow from the weeds you didn't. If sowing in rows, check the desired spacing on the pack and make shallow drills with the edge of a hoe or end of a bamboo cane.
- After sowing, gently rake and firm the soil to ensure the seed or drills are covered
- Peg out some netting over the plot to stop birds stealing your seeds
- Gently water the bed using a fine spray to avoid disturbing the seed. On weedy or very dry soils, water the bottom of the seed drills *before* sowing the seed.
- Thin out the seedlings to the spacings given on the pack. Broadcast seed doesn't normally need thinning.
- Keep weeding out unwanted plants to give your annuals more chance to grow.
- Tall annuals such as *Tithonia* and larkspur may need staking or growing through plant support netting.
- Hardy annuals (those which can survive frosts) can either be sown in autumn or spring. Half-hardy annuals should be sown in spring, after frosts are past.
- If you prefer or if the ground isn't available at sowing time, seed can be sown in trays or modules and planted out later.

Annual seeds to grow

Our research suggests the following annuals score highest for pollinators. Those in **bold** are native or ancient arrival species

Scorpionweed
Рорру
Sunflower (not pollen-
free types)
Nasturtium
French marigold
Scabious
Poached egg plant

Cerinthe major	Honeywort
Borago officinalis	Borage
Eschscholzia	California poppy
californica	
Centaurea cyanus	Cornflower
Anchusa capensis	Cape alkanet
Calendula officinalis	Pot marigold
Anthemis arvensis	Corn chamomile

Special historic cornfield annuals

Special installe confined annuals		
Pheasant's eye	Adonis annua	
Cornflower	Centaurea cyanus	
Corn marigold	Chrysanthemum	
	segetum	
Red hemp-nettle	Galeopsis angustifolium	
Prickly poppy	Papaver argemone	
Rough poppy	Papaver hybridum	
Corn buttercup	Ranunculus arvensis	
Night flowering catchfly	Silene noctiflora	
Corn chamomile	Anthemis arvensis	
Corncockle	Agrostemma githago	
Purple viper's-bugloss	Echium plantagineum	

These plants came to Britain with the first Neolithic farmers, who accidentally brought their seed with their cereal crops from the Middle East. They need the constant disturbance and bare soil of arable fields and are now very rare in the countryside. There are many more, but this list gives the most attractive flowering types. Most of these are in MeadowMania's Annual Mix Gold

How easy is it to do?

Very easy/easy.

How much will it cost?

Cost will depend on the size of the bed but seeds of annuals are fairly cheap, costing around £2-3 per packet. A typical annual seed mix such as those offered by Pictorial Meadows costs £15 and will cover 7 square meters. The cornfield seed mix from MeadowMania costs £7.35 for 25 square metres.

How effective is it for the target species?

Effective. This is dependent on choosing annuals that are attractive to pollinators and/or produce seed that will be taken by birds.

Golden rules – what the science tells us

- Pollinator value varies between types of flower and even selections of the same flower. Choose
 your annuals from lists of ones good for pollinators or which have a bee or pollinator-friendly logo
 on the seed pack.
- Avoid double cultivars which often lack or have inaccessible pollen and nectar, single flowers are be best.
- Choosing a sunny, not-too-windy spot will give you better flowering and greater numbers of pollinators than in shade or an exposed site.
- Do some research! We still don't know about the relative merits of annual garden flowers so try sowing a flower you like the look of and, if it proves popular with the pollinators, sow it again in future years or, if not, try something else. The lovely thing about annuals is that you can try something new every year.

- The more flowers you grow, native or non-native, the more pollinating insects you will support.
- Leaving seed heads on and stems standing into winter will increase the wildlife benefits even further.

What to look for?

Most insect activity will begin as your annuals start to flower. Warm and sunny days will bring out the greatest abundance and particularly the butterflies and honeybees. Other bees, flies and solitary wasps may be active on cooler days. Look closely at the leaves and stems of your annuals to find a range of plant bugs, shieldbugs and aphids, along with their predators. Seedheads may attract sparrows, goldfinches and greenfinches. Search for ladybirds on dead stems at the end of the season.

Things to be aware of

- If you are starting a new perennial bed, you are likely to have a lot of free space after planting (allowing the plants space to grow). This space can usefully be filled with annuals
- Some plants used by gardeners as green manure (to dig in to improve the soil) have flowers that are popular with pollinating insects, *Phacelia tanacetifolia* being the best example https://www.rhs.org.uk/advice/grow-your-own/features/sowing-birds-bees
- It may seem contradictory but it can advantage pollinating insects if you use your bed of annual flowers as a cutting garden, picking some (but not all, of course!) of the flowers for the vase. This will help promote a longer season of flowering.
- Unless you need the ground for autumn sowing, leave the dead plant stems standing through winter. Birds such as finches can pick over the seed heads while the plant stems make safe overwintering sites for many invertebrates.

Further information

Our guides:

 $How to: Improve your garden for \underline{bees \& other pollinators} \\ \ www.wlgf.org/ht_improve_pollinators.pdf$

How to: Choose pollinator plants for winter and early spring www.wlgf.org/ht_plants_winter.pdf

How to: Choose pollinator <u>plants for late spring and early summer</u> www.wlgf.org/ht_plants_spring.pdf

How to: Choose pollinator <u>plants for late summer and autumn</u> www.wlgf.org/ht_plants_summer.pdf

Our website

Our web pages on bees and wasps www.wlgf.org/hymenoptera_intro.html

Our web page on hoverflies www.wlgf.org/hoverflies.html

Our web page on pollen beetles www.wlgf.org/pollen_beetles.html

Our web pages on butterflies and moths www.wlgf.org/lepidoptera_intro.html

External websites

RHS <u>guide</u> to sowing annuals and biennials (with lots of links to sowing hardy and half-hardy seeds) www.rhs.org.uk/plants/types/annuals-biennials/growing-guide

MeadowMania <u>annual seed mix</u> www.meadowmania.co.uk/wild-flower-meadow/cornfield-annual-seed/cornfield-annual-delux-seed-mix

Book

Arable plants – a field guide. Phil Wilson & Miles King (2003) English Nature

Some examples of garden-worthy annuals Photos by Helen Bostock

