Planting Seeds of Hope

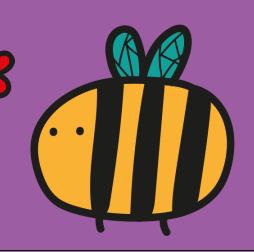
Flower planting guide



Bee Positive!

Planting Seeds of Hope

Instructions, notes and resources



We have selected easy to grow and quick flowering annual plants that can be grown from seed to flower in approximately 8 weeks. For more planting ideas and links to additional resources check the bottom of this document. Select one or more of the following seeds:

- Borage
- Cornflower
- Nasturtium
- Sunflower
- Cerinthe



If you only plant one, make it Borage.

Compost

Avoid peat based compost if you can. The intensive mining of peat has adverse effects on the climate, and destroys valuable ecosystems.

Seed Trays or Pots

Conventional seed trays from the garden centre are relatively inexpensive, but yoghurt pots with a drainage hole cut into the bottom work just as well.

Milk, juice and soup cartons (the coated cardboard kind) can be cut in half and the bottom halves make perfect planters. Remember to make drainage holes in the bottom.

See our photo planting guide at the bottom for more information!



Planting Instructions





All these seeds can be planted between February and June.

- Fill the seed tray or carton with compost ¾'s full.
- Water liberally, this will slightly swell the compost.
- Let the water drain through the drainage holes, pouring off the excess.
- Place it on a tray or something similar to catch any extra water.
- Make a small hole in the compost with the tip of a pencil approximately a centimeter deep.
- Drop one seed into the hole and cover with a sprinkle of compost.
- Moisten the compost and place on a sunny windowsill.
- Once seedings have germinated plant out after the last frost.

Germination

Borage, Cornflower and Sunflower seeds will germinate and be visible within 7 - 10 days

Nasturtium seeds will germinate within 10 - 12 days

Cerinthe can take up to 21 days.

Plant out after last frost, this is usually in April as March often has cold snaps.

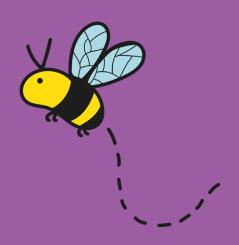
All of these seedlings will thrive in the garden but they will also thrive in a variety of pots and containers so use your imagination!

Borage planted in the garden can grow to be over 60 cm tall, but planted in a small pot, it will still grow and flower, just in a smaller version. Bees don't mind, they will thank you anyway!

Bee Safe







Bees have stings, and getting stung by a bee is painful, but for most people it is harmless.

The good news is bees don't want to sting you and will only sting if they are feeling threatened or confused. Behaving sensibly around bees should keep you safe.

Do not disturb bee or wasp nests and never swat a bee or wasp. Remain calm and they will fly away harmlessly most of the time.

However when a wasp is injured it releases a chemical message that attracts other wasps to come to it's aid, which could result in more stings.

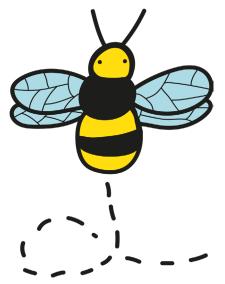
A sting will feel hot, and a red bump will develop around the sting and it will itch. For most people these symptoms won't last long.

If you have have been stung it's important to tell an adult immediately because some people are allergic to stings from insects. The symptoms of an allergic reaction include dizziness, nausea, swelling, hives (red patches of skin that sting and itch) a tight feeling in the throat and difficulty breathing.

Call the doctor if you or your parent are worried about redness, swelling, or itching.

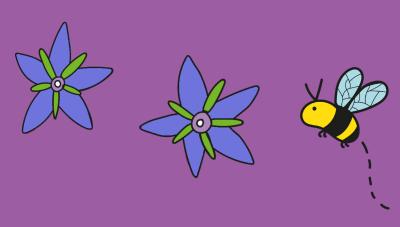
Follow these steps after getting stung:

- Have an adult help you remove the stinger, if one is left behind after a bee sting.
- Wash the area with soap and water.
- Apply some ice to the area to reduce the pain and itching.



Remember if a bee or wasp flies around you, stay calm. They don't want to sting you!

Borage Borago officinalis



Also known as Star Flower and Bee's Bread.

Our number one bee friendly plant is so beloved by bees it's folk name is Bee's Bread!

Bees adore borage because they love blue flowers but also because borage flowers refill with nectar within two minutes. Many flowers take 24 hours to replenish their supply of nectar so this makes borage a great pollinator-friendly plant for small gardens or containers.

The Celtic name for borage, borrach, translates as "courage". Celtic warriors used to drink wine infused with borage to give them courage before battle. The ancient Greeks and Romans also believed borage invoked courage

Borage is a brilliant self seeder. This means it easily spreads by itself and will pop up in places you haven't planted it. Attached to each black borage seed is a little white nutty treat that ants love to eat. So they carry away the borage seeds and once they've eaten their treat they drop the rest of the seed.

Borage seeds are large enough to handle which makes planting borage super easy even for beginners.



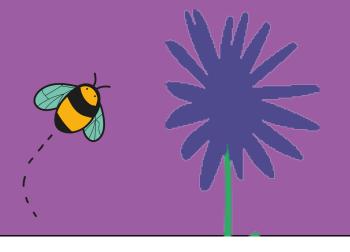




You can plant borage seeds directly outdoors after frost but the seedlings can be susceptible to slugs and snails when they are young so we like to start ours off indoors on the window ledge.

Plant your borage seedlings out when they are about 4 weeks old either directly into your garden or into pots.

Cornflowers Centaurea cyanus



Also known as Bachelor Buttons, Ragged sailor, Witches' bells and Happy skies.

Why are cornflowers known as Bachelor Buttons? In the past when a bachelor (a single man) was courting, he would wear a cornflower in his buttonhole, if it wilted quickly it was a sign his love would not prosper.





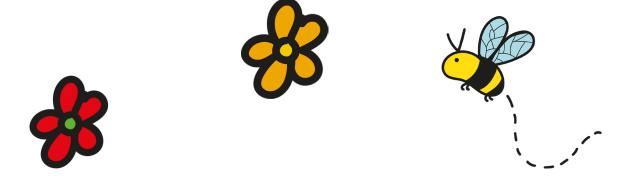


Bees love blue flowers and cornflowers are bright blue! They are also easy to grow from seed and will happily grow in pots and containers. Cornflowers used to grow freely in wildflower meadows but changes in farming practices have led to them becoming increasingly rare and even considered as weeds in spite of their beauty.

Because cornflowers are native British wildflowers the more of them you grow the better it is for your native wildlife!

Another bonus of cornflowers and wildflowers in general is their ability to thrive in low nutrient soils. The less we use fertilisers the more these natural bee magnets will flourish!

Time lapse of cornflowers from seed to flower



Sunflower Helianthos annuus



Sunflowers are so attractive to bees and other wildlide that Friends of the Earth has a page devoted to <u>Growing sunflowers for bees, birds</u> and other wildlife

A recent study (2018) from North Carolina University, states that 'Bees fed a diet of sunflower pollen show dramatically lower rates of infection... suggesting medicinal and protective effects for pollinators in peril'

In other words, sunflowers can help bees to stay healthy!

Sunflowers love a sunny position and many varieties get quite tall but there are dwarf versions too that can thrive in pots and small spaces. Whatever the height of the sunflower, bees love

the pollen and nectar and birds love the seeds, so these are a great wildlife friendly addition to any garden.

Time Lapse of Sunflower from Seed to Flower







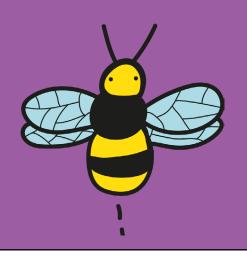
Sunflowers are great for pollinators but can be tricky, we've found the dwarf varieties easier to grow so start with them and try a full sized one if you fancy a challenge.







Nasturtium Tropaeolum majus



Nasturtiums are wonderful plants for beginners and work really well in window boxes and pots. The seeds are large and easy to handle and quickly grow into beautiful yellow and orange flowers that are highly attractive to bees.

A great plant to start from seed they will happily grow in any type of soil.

If you have space get one of the climbing varieties and watch how quickly nasturtiums will scramble up a trellis and cover it with big green leaves and bright orange and yellow flowers!

They also grow in trailing varieties that spread like a carpet and dwarf varieties like the one planted in the boot on the next page. For more on different types of nasturtium and a growing guide <u>How to plant nasturtiums | Life and style</u>

Nasturtiums are not native British flowers, however have had enough time to integrate into our native fauna that they aren't considered invasive. They originate in South America and were introduced to Europe in the 1600's from Peru where they have a long history of medicinal use.







Nasturtiums as well as being a favorite of bees are edible for humans! Try adding the flowers or young leaves for a peppery taste in salads.

Cerinthe

Cerinthe major Purpurascens





Cerinthe is so beloved by bees it's folk name is Honeywort. Wort in middle english (the form of english that develoed and was spoken between 1050 and 1500) means plant, so to much of Medieval England cerinthe was the honey plant.

Perhaps this is not surprising because Honeywort is a relative of borage!

The name cerinthe comes from the Greek keros for wax and anthos for flower because in ancient times people thought bees got the wax for their hives from cerinthe flowers.

This species is an unusual member of the borage family because it does not have hairy foliage as most family members do. We started planting for bees in 2018 in our small Yorkshire back garden, and noticed loud buzzing around our cerinthe flowers.







This was how we discovered buzz pollination, a form of pollination unique to bumblebees, who vibrate the flower to get it to release its pollen.

Plant some cerinthe and listen for buzzing! Or you can watch buzz pollination here.

This Vibrating Bumblebee Unlocks a Flower's Hidden Treasure | Deep Look



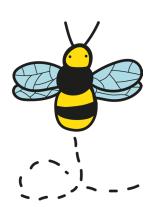


Photo Planting Guide



Cut the top off of a cardboard juice carton and make drainage holes (about 4, each a couple of mm wide) in the bottom with a sharp knife.

Remember to bee safe! Get an adult to help.







Fill with compost. Water and allow to drain for a few minuites as a lot of the water will run out through the bottom, dont worry your compost will still get nice and moist. Plant your seed.







Sprinkle compost on top of your seed, lightly water. Place on a sunny window ledge. Check every 3-4 days, if the top soil is still damp let it dry before you water it again.

After a month your juice cartons will start to look like the photo on the right.







We planted these nasturtiums seeds on 3rd march 2020. We planted them out in May and had many happy bees, and flowers all the way through to December!

More planting ideas



We selected these seeds to start you off because they are a rich source of pollen and nectar but easy to grow from seed and easy to grow in pots and containers.

They are also quick to grow from seed to flower which makes them fantastic plants for beginners and children.

If you have a bit more space and time bees also love poppies, daisies, catmint, roses, yarrow, cosmos, foxgloves, honeysuckle and heather.

Bees also love herbs including rosemary, thyme, chives, mint and lavender.

For more ideas on what to plant for bees and other pollinators follow these links:

Plant flowers for bees and pollinators Gardening for bees

Plant for pollinators RHS

Wild flowers for bees

RHS School Gardening

Wildflower gallery

