

KENT'S PLAN BEE



June 2023 Summary Newsletter

30 Days Wild for Pollinators Summary

We have just finished 30 Days Wild for Pollinators, where every day in June we did an activity related to pollinators on our Facebook page. Set up by the Wildlife Trust, 30 Days Wild aimed at getting everyone connected and closer to nature through doing a different nature-based activity every day.

If you took part, we would love to see which activities you did. Tag us in your photos @KentsPlanBee or email them into us planbee@kent.gov.uk



Photo credits: The Wildlife Trust

As part of our 30 Days Wild for Pollinators posts, we celebrated two very big national campaigns:

THE GREAT BIG GREEN WEEK

Photo Credits: The Great Big Green Week

The Great Big Green Week – 10-18 June

[Kent Green Actions](#) pulled together a great list of events that took place over this week, which included some pollinator themed events. These included Nature Friendly Open Gardens, Wilder Kent Safaris looking for moths and Heath Fritillaries and a Bio Blitz!

National Insect Week – 19-25 June

Organised by the Royal Entomological Society and supported by partner organisations throughout the UK and Europe, [Insect Week](#) is a celebration of all things insect. We loved posting about each pollinator insect group every day that week, with pollinators to see and how you can help them in your garden or green space.

Some of our favourite posts we shared that week included:

- A [poster](#) of many well-known British Pollinators
- [Kent Downs AONB's post](#) on day-flying moths
- The [Big Wasp Survey's flow chart](#) on social wasp identification

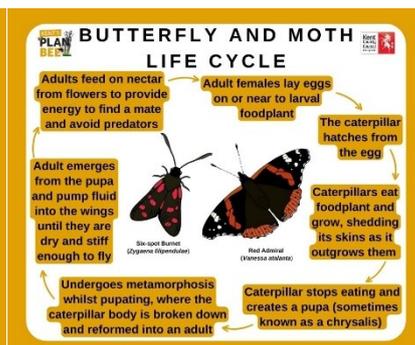
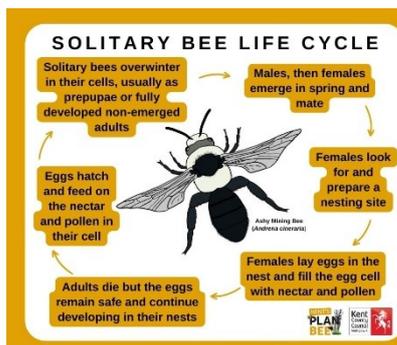


Photo Credits: Insect Week

The Cycle of Life of Pollinating Insects blog

Our brilliant Plan Bee Officer, Emma Lansdell, has written a great [blog on pollinator life cycles](#) for Kent Wildlife Trust, featuring the life cycles that many of our pollinators go through. Give it a read to learn the general overview of the life cycles of our fascinating pollinators.

If you are still interested in learning more about our pollinator life cycles, why not check out our previous newsletter articles on the life cycle of [solitary bees](#), [bumblebees](#), [butterflies and moths](#).



Fascination about Pollination

We've pulled together some of our favourite lesser-known facts about pollinators that we think you will find fascinating!

Electrostatic charges

Why are some pollinators hairy or furry? Aside from the benefit that fur can provide to help keep insect bodies warmer in cooler weather, there is an added benefit which is that the fur or hairs generate very small electromagnetic (static) charges as they move through the air, generating small positive fields of charge. In response, and through evolutionary adaptation, the pollen of many flowering plants has small fields of negative electrostatic charge – which means the pollen is attracted to the furry pollinating insect and sticks to it and doesn't drop off whilst the insect is in flight.



Credit- Ms Nicole Elmer, Harold H. Zakon [PNAS 2016;113:26:7020-7021](#)
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The importance of static or electromagnetic charge on pollinators has also been found to have another benefit which is used by the plants.

The scent or perfume of the flowering plant is an important means of attracting pollinators, but some plants only have a limited supply of scent or perfume that can be produced. A [recent paper](#) (2021) from the University of Bristol has shown that although the positive static fields around a pollinator (bumbees in this case) are miniscule, the flower is able to detect the bee being close and will release it's scent in response. As the researchers say in their paper: "Frequent visits by charged pollinators to a flower would cause charge to build up, which might exceed a threshold for scent release. Charge could therefore provide a useful indicator of how many pollinators are in the area, allowing the plant to assess the real time potential for pollen dispersal. This discovery unveils a previously unknown type of interaction between insects and plants, a world of elusive electric cues, that us humans cannot detect."

It also raises the question – is it the insect or the flower that controls and drives the vital pollination relationship, or probably a mutually beneficial co-dependence that is fined-tuned over millions of years by the evolutionary engineering!

Ultraviolet landstrips



A dandelion when viewed through an ultraviolet camera, as if viewed by an insect – and one using the wavelengths of human vision

The eyesight and vision of pollinators is quite different to those of humans. Pollinator vision has adapted over millions of years to detect the important cues in their environment to allow successful survival and reproduction. One feature of pollinator vision (again, bumblebees are used in this research) is the ability to see in the ultraviolet wavelength – whereas humans can see wavelengths from around 400 (blue) to as far as 800 (red) nanometres, bumblebees can see from as low as 300nm (ultra violet) but only up as far as 700nm (orange) (they can't see red, although they still visit red flowers – probably attracted by scent and other cues). Many flowers have ultraviolet patterns on the petals that are visible to bumblebees and some other insects, but invisible to us. These patterns guide the insects towards the nectaries and are called nectar guides. An additional adaptation of many flowers is that once they have been pollinated, the colour of their petals changes from purple or violet to blue – which provides added signs to the pollinators whether to visit the flower or not. Plants in the borage family, especially lungwort and some forget-me-nots, are well-known for this beautiful colour change after pollination.

Bite-sized facts

8 out of 10 wild plants in Britain depend on insects for pollination!	Insects are vital in pollinating some of our crops and help provide one in every three mouthfuls of our food.	In the UK, all our pollinators are insects, including bees, beetles, butterflies, wasps, moths & flies!
Contrary to popular belief that the honeybee is the best pollinator of our flowers, solitary bees are well documented to be the better pollinators.		For example, a single red mason bee, <i>Osmia bicornis</i> , pollinates 120 times more flora than a single worker honeybee!

Do you have a favourite pollinator fact? Why not let us know by emailing them into us planbee@kent.gov.uk
Thank you to our Plan Bee Officer, Emma Lansdell, for writing this month's article.

Pollinators to see in July

Here are some pollinators you may see this month:

Bees: Common Furrow Bee, *Lasioglossum calceatum*

Moths: Ruby Tiger, *Phragmatobia fuliginosa*, Straw Belle moth, *Aspitates gilvaria*

Butterflies: Purple Hairstreak, *Neozephyrus quercus*, Meadow Brown, *Maniola jurtina*

Beetles: Longhorn Beetle, *Rutpela maculata*, Wasp Beetle, *Clytus arietis*

Wasps: Ornate Tailed Digger Wasp, *Cerceris rybyensis*, Tree Wasp, *Dolichovespula sylvestris*

Flies/ hoverfly: Conopidae - Thick-headed Fly, *Sicus ferrugineus*

Wildflowers to spot this month include Tufted Vetch, Teasel, Rosebay Willowherb, Fennel, Common Mallow, Ragwort, Tansy, Common Knapweed, Wild Carrot, Common Bedstraw, Field Scabious, Perforate St John's Wort, and Wild Marjoram.

Spotted any of these or any other pollinators and wildflowers? Post them on our [Facebook page](#), tag us in your photos @KentsPlanBee or [email us](#) your photos.

POLLINATORS TO SEE IN JULY



Ornate Tailed Digger Wasp
Cerceris rybyensis



Purple Hairstreak
Neozephyrus quercus



Ruby Tiger
Phragmatobia fuliginosa



Conopidae - Thick-headed Fly
Sicus ferrugineus



Longhorn Beetle
Rutpela maculata

Others to See

Common Furrow Bee
- *Lasioglossum calceatum*
Meadow Brown Butterfly -
Maniola jurtina
Tree Wasp - *Dolichovespula sylvestris*
Wasp Beetle - *Clytus arietis*
Straw Belle moth - *Aspitates gilvaria*

Spotted any of these? Why not share them on our Facebook page @KentsPlanBee



Upcoming Events and Resources

Wild About Open Gardens

The [Wild About Open Garden events](#) are back! The final three open gardens are taking place in September. Book onto this and other events through the [Kent Wildlife Trust website](#).

- Sat 3 Sep 1-5pm: Lacey Down, 22 Canterbury Road, Lydden, Dover, CT15 7ER
- Sat 9 Sep 1-5pm: Bearsted, near Maidstone
- Sat 16 Sep 1-5pm: Langdon Court, near Faversham

Bee-riliant Resources

A list of some great resources from the last month:

- BEESPOKE [pollinator poster](#)
- Bumblebee Conservation Trust ["meadow in a pot" video](#) and [Pond plant for bumblebees blog](#)
- People's Trust for Endangered Species [Common butterfly and bee ID guides](#)

Free Wildflower Event at Luddesdown

Spend the day at Luddesdown with a guided walk of the Silverhand Estate exploring the wildflowers on 15 July 1400-1600. Book your tickets on [Eventbrite](#).



Keep up to date with the latest news via our [Kent's Plan Bee Facebook page](#)

If you received this email indirectly and would like to subscribe to our mailing list, please email us on the address below with the subject line "Sign Up". If you wish to unsubscribe from this mailing list, please email us on the address below with the subject line "Unsubscribe".

Do you have a Kent pollinator news story or event that you would like featured in our newsletter? Have you created a pollinator friendly community space? Got your neighbours together to create a row of pollinator friendly gardens? Or do you have an event about Kent's pollinators you would like advertised? Email it to the address below and we will be in contact about a potential space in the Newsletter.

planbee@kent.gov.uk

All the previous editions of the Newsletter have now been added to our webpage. You can download them as PDFs or share the website address on your social media. Find all the Newsletters on the [Pollinators section of Kent County Council's website](#).

Edited by Hannah Simmons, Graduate Biodiversity Officer, Kent County Council.

For a Pollinator Friendly Garden of England

