

The Ipswich & East Suffolk Beekeepers' Association First Founded 1880; Charitable Incorporated Organisation 1183025

2021 Autumn Newsletter

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Opinions expressed in this Newsletter are not necessarily either those of the Editor nor of the Association

The Suffolk Beekeepers' Association is an Area Association of The British Beekeepers' Association. <u>http://www.bbka.org.uk/</u>



I hope this newsletter finds you well. The honey flow is well and truly over and no doubt you are in the final throes of tucking in your bees for the winter, so settle down and have a good read of all the articles sent in by our members, there's a great selection. If you have any articles for future issues please pass them on to me.

Don't forget you can still enter the National Honey Show but do it quickly! Details on page 3.

Ed

Welcome

To our new members: Andrew Beattie, Senna Gaskin, Francis Hammond, Gemma Marriage, Anthony Quinn, Andrew Race, Carl Thomlinson & Stephen Tucker.

Hope you've had a good first season & look forward to seeing you around. Feel free to join the WhatsApp group (mail me for a link) & take a look at our website (<u>https://iesbka.com</u> and https://suffolkbeekeepers.co.uk)

Mentoring

Firstly a shoutout from our Mentoring Coordinator Steve Willingham: Further to my Mentoring article earlier in the year can I please remind potential mentors to complete your membership renewal forms accordingly by ticking the box declaring you are willing to help a beginner. Support to beginners is an essential part of the Associations educational remit and all your support is very much appreciated.

Thank you

I couldn't live without..

We asked for comments on beekeeping kit that you couldn't live without (or alternatively kit that was a complete waste of space). Read on to see the opinions...

An electric carving knife, unrivalled as an uncapping tool. I only bought a cheap one £9 from Dunelm it was absolutely fine. Right knife length for a National Super. Zipped my way through.

Anon

I have a milk / beer crate (I found it laying in the road... no beer or milk bottles present). Handy for piling hive parts on during inspections (saves my back), as an emergency hive stand and as a seat to enjoy a well earned cuppa.

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Karen

I've been getting my 6 year-old grandson to stuff empty loo-roll cores with twists of hay. Then I put a bit of newspaper in the base of the smoker, light it and pop up to three of these inside, depending on how long I think I'll need the smoker. Of course he had to draw faces on them all before I could use them but it all helped to pass some time and they're really practical.

Carol



I bought this several years ago - supposed to help lift frames out of the brood box for inspection. I thought it would be a good idea as I get sore joints at the top of my index fingers... totally useless. The only positive is that it didn't cost much!

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Canadian Bee Clearer.

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I find that once I have put this under the super, the bees are usually gone from it within about 4 - 5 hours. I can then remove the super without having to brush the bees from all the frames. I made mine with some scrap plywood and 5 cones made on my 3D printer.

The second was also made on my 3D printer. I find the frame holders very useful when carrying out an inspection. I can hang the first frame one it and then there is enough room to shuffle the frames forward in the hive as I remove and inspect each one.



Steve T

I had this uncapping tool given as a present. Makes uncapping a doddle



Gillian

It gets hot in a bee suit after you've looked through quite a few colonies. This year I bought a

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beekeeper's vest and wear it with normal long trousers & long sleeved shirt. Worked a treat. I may have worn the full suit three times all season. So much quicker and easier with the vest.



(probably the best view of me...)

Barry

The National Honey Show

The National Honey Show is being held 21-23rd Oct'21 and this year there are Suffolk classes you can enter (£1.00 per entry). Further information can be found at <u>https://www.honeyshow.co.uk/</u> (<u>https://www.honeyshow.co.uk/download-schedul</u> <u>e.php</u>). Chris Poupard (<u>chris.poupard@btinternet.com</u>) has kindly volunteered to take entries to the show for those who wish to enter but aren't attending. The Suffolk classes are as follows: 351. Two jars light 352. Two jars medium 353. Two jars medium 354. Two jars naturally crystallised

355. Two jars soft set

Completed entry forms for the above classes must reach the Entries Secretary by 4th October 2021. (Email entries@honeyshow.co.uk or by post Entries' Secretary, 1 Old School Cottages, Etling Green, Dereham, Norfolk NR20 3EU

What to do with wet honey by Paul White

I like to have honey from the different seasons, the taste of spring honey or early summer is so different to the rounder, stronger flavours found later in the year but sometimes extraction might not normally be considered as the bees have not capped the frames.

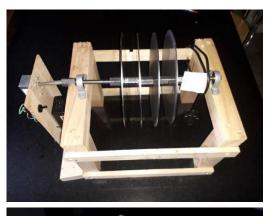


A good rule of thumb for a beekeeper is to not extract honey from a frame which is not 80% capped as it might be too wet (too much water in the honey might cause fermentation). It is possible to do a check by shaking the frame sideways and if no liquid flies off it might be OK but this isn't a guaranteed check and once it is in the bucket after extraction and you find, with a refractometer, that the water content is 21% what can you do?

In the past I had the choice of consuming the honey quickly, making mead out of it, feeding the honey back to the bees or trying to dry the honey...my preferred choice.

My usual method of drying has been to place open buckets in a small room with a fan blowing air across the top of the buckets. I find that I can remove about ½ % of water from the honey over 2 days; and if I have a dehumidifier running in the room I can generally drop the water content about 2% in 7 days. I have noted that there is a limit to the amount of water that can be removed as the surface of the honey dries out, but the honey liquid underneath remains wet. Regular stirring can improve the drying so I sought a better method of drying the honey.

Commercial driers operate with stainless steel discs rotating in a warm, dried atmosphere. Even the smallest one cost about £500 to buy and the cost of losing a fermented bucket of honey is about £150 in sales. I set about replicating the design with available parts. My solution cost £55 and about 5 hours work. All items in contact with the honey are stainless steel and the structure was designed so that the rotating shaft sits just above the top of a standard 30lb bucket.









The motor is mounted and connected to the screw shaft by poly tubing. The 4 disks of the drier rotate at 5 rpm and I have a fan (removed from an old PC) positioned next to the bucket blowing through the disks. Drying now takes 6 hours to remove 3% water and on completion I drip-dry the disks then move the unit outside to recruit the bees to help clean them.

Parts listed below for anyone who is interested in making a similar unit.

Stainless Steel 304 Laser cut disc/blank.	£31.00
2mm thick circle disks x4	from eBay seller
CONTRACTOR OF THE OWNER	kmlasertech
K	
2mm 304 DP1	
Disks are centre drilled	
with a 10mm drill bit.	£20.12
	220.12
	From Toolstation
100	
1m M10 Stainless Steel	
Threaded Bar	
10x connector nuts	
	£5.24
0 0	from eBay seller
	ebuff-2020
10mm Bore Diameter	
Pillow Block Mounted	
Ball Housing Bearing x2	
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	£6.26
Party Nor tal	from eBay seller
A. A	binggoshop
Type DC Speed Reduction	
Motor Large Torsion Worm Gear Motor V	
5RPM	

Additional items (switch, wiring, poly tubing, 12v transformer (ex laptop) and wood I found in my garage but could be sourced online.

Paul White runs <u>Box House Beekeeping Supplies</u> in East Bergholt, Suffolk and has been an active member of Ipswich and East Suffolk BKA for many years.

Suffolk Beekeepers' General Husbandry Training

As all beekeepers know, the bees make no allowance for your skills – or lack of them. We are all faced with similar, never exactly the same questions – principally: "What the heck are they doing now?" Alternatively, "Why on earth did they do that?"

So, how do we improve our skills? Not everyone wants to take the BBKA's Modules. Even if you do, beekeeping is essentially a practical business – you have to be able to manage the bees. Alongside the Modules – which test your pen & paper knowledge – there are practical assessments. These are the Basic, the General Husbandry and the Advanced Husbandry assessments.

The General Husbandry assessment is the only one that takes place in your apiary, using your equipment – a minimum of three colonies - over a couple of hours. The BBKA says that before taking it you should have the Basic Assessment and have kept bees for five years. Really, what is involved isn't difficult; it is what you do - or should be able to do - with your bees every summer. The trouble most people have is a lack of confidence. To clarify thinking and procedures and give that confidence, we run prospective candidates' courses. Starting in 2013, these were over two days; more recently, they have been over three. The BBKA runs similar courses but, perhaps because there is already our course in East Anglia, none of theirs have yet been held so far east.

Due to Covid, our 2020 course had to be cancelled. It ran this year and was held in Dallinghoo, Nowton and Troston where there were halls available close to apiaries. Running it were our County Education Secretary, Jane Corcoran, and three Master Beekeepers: Mark Butt, David Burns and Jeremy Quinlan. The fee was £30 for all three days.

Talks took place in the forenoons and in the afternoons we were with the bees – and that was more popular. What did we cover? General beekeeping! If you want to know the detail, ask for a copy of the programme – or you can go to the BBKA website and look at the General

Husbandry syllabus. There was – and can be - nothing difficult (although there is a lot of it - Ed).

Judging by the after-the-course comments, it was much enjoyed. We hope those on the course will take their General Husbandry assessments in 2022 and will all be successful. If you would like to join our course in 2022 and have (or will have) the necessary qualifications by 2023, email Jeremy(jeremyq@tiscali.co.uk) and ask him to inform you when details are published. The number will probably again be restricted to twelve. Those successful are usually asked to become Basic assessors. This is not a chore but a delightful opportunity to meet up-and-coming beekeepers.

I urge those who have been keeping bees for a year or two to take the Basic and those who have four or five years' experience to take the General Husbandry – your beekeeping will improve and you will enjoy it even more.



A rare sight, a white-eyed drone. Sadly the white eye is blind, so unless the queen is coming up on his right he's not going to do too well. Thanks to Heather Carter for the pic

Intermediate training

At the last committee meeting we agreed with Jeremy's suggestion that it would be good to add intermediate level practical lessons to complement the beginners/all comers lessons at the teaching apiary. To make this happen in practice we need support to free up some of our existing teachers to cover the lessons. If you have passed the BBKA basic exam, been beekeeping long enough that you should have(!), or have currently offered your services as a mentor, then we'd like you to consider offering to help with the occasional beginners' hive inspections. With enough people offering it would only amount to one or two Sunday afternoons per season.

The intermediate lessons could cover things such as:

- Queen rearing
- Requeening nasty hives
- Using nucs
- Maximising your honey crop

It's a great opportunity to help build up the skill levels in our community. While the thought is fresh, email Jeremy now to offer your services (jeremyq@tiscali.co.uk)

Sugar is just sugar – or is it?

Beekeepers use many forms of sugar to feed their honeybees. Here's a quick guide to feeding sugar. First, a bit of chemistry:

The most common form is liquid feed, either made up with granulated sugar dissolved in water or bought as invert syrup (sold under trade names such as Ambrosia and InvertBee). Granulated white sugar is pure sucrose, a complex molecule extracted and refined from sugar cane or sugar beet. The sucrose molecule can be split into two simpler sugar molecules, glucose and fructose. This splitting process is known as inversion and can be done in many ways. Wikipedia has a very good article on "Inverted sugar syrup". All other forms of granulated sugar (raw, natural, brown, demerara, muscovado etc) contain compounds which are harmful to bees, so never use them to make liquid feed.

Practical differences between sucrose and invert syrup for feeding bees

1 Digestibility

Bees naturally store and eat honey which is mostly glucose + fructose. If they are fed a sucrose solution they have to add an enzyme, invertase, which is produced in their hypopharyngeal gland and inverts the sucrose to glucose + fructose. This takes time & energy and may reduce their ability to produce "bee bread" for feeding larvae. They can eat or store concentrated invert syrup with no extra processing. In practice both seem to work equally well.

2 Storage

Sucrose solution tends to grow black mould when kept in a container or feeder. This can be prevented by adding Manley solution (see below). Some people add citric acid, lemon juice or cider vinegar which work by inverting the sucrose. Concentrated invert syrup doesn't grow mould and will remain in good condition for many months.

3 Water content

Ambrosia and InvertBee are approximately 73% sugar:27% water by weight. This is close to the natural composition of honey. It's more concentrated than the traditional recipe for thick syrup (2lbs sugar dissolved in 1 pint of water, 62% sugar:38% water). Some beekeepers feed thin syrup at certain times of year (1lb sugar to 1 pint of water, 44% sugar:56% water). Simple arithmetic will give you the metric equivalents. I don't bother with thick or thin mixtures. I feed concentrated invert syrup at all times of year except winter and the bees always take it down. If they want more water, the flying bees can go and fetch it.

4 Price and convenience

This year's price for SBKA bulk invert syrup is 71p/kg. Granulated sugar prices have been reported as low as 57p/kg at some supermarkets. But to quote one of our members, "life is too short to faff about with packets of granulated sugar!" - a sentiment with which I agree wholeheartedly.

Manley solution

Named after the famous beekeeper R.O.B. Manley, this consists of thymol crystals diluted in alcohol. It is very effective at preventing mould and fermentation in sucrose syrup; it also helps to combat nosema.

Thymol crystals can be bought from the usual beekeeping suppliers. Thymol doesn't dissolve in water, so it can't be added directly to syrup but must first be dissolved in alcohol. You can use concentrated ethyl alcohol (sold in shops as vodka) but the best solvent is isopropyl alcohol or IPA (NOT the stuff in beer cans). This is also known as isopropanol and is widely available online for a few £ per litre. But whatever you do, please don't use Methylated or Surgical Spirit they have extra stuff added which can be harmful to bees. My Manley recipe: dissolve 10g thymol crystals in 100ml IPA. Add 5ml of the solution to 5 litres of sucrose syrup and shake well.

Fondant

Beekeeping fondant is just powdered sugar with invert syrup added to soften it. Baker's fondant is a similar product. You can find recipes online for making your own, but don't be tempted to use domestic icing sugar which contains chemicals such as anti-caking agents. Posh fondant containing pollen is much more expensive. Suppliers claim that it gives colonies a boost in early spring when supplies of stored pollen may be running low. It's a mystery how the bees have managed for thousands of years without it!

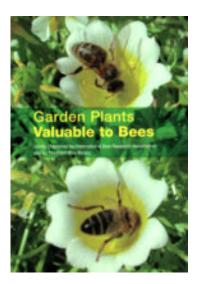
If you haven't any fondant, an easy alternative is to dunk an unopened 1kg paper packet of granulated sugar in water for a short while and leave it to dry overnight. The outer layer of sugar will set hard, then you can cut a hole in the side and put the bag over the crown-board hole. The rest of the sugar will set as the bees eat into it. Happy feeding!

Chris Stephens

"Garden Plants Valuable to Bees"

Jointly published by International Bee Research Association and Northern Bee Books. ISBN 978-0-86098-287-6 Price £9.95 plus p&p

A review, and reflections on insect friendly gardening.



This book was first published in 1981 and the reviewed copy is a reprint of the 2008 edition. The Northern Bee Books website blurb says "The garden plants selected for inclusion are not only valuable for bees but worth growing in their own right. Each plant is given with a Latin name, a common name, its flowering season, its height and some general notes regarding optimum locations. An essential guide for all environmentally interested gardeners."

Overall it does what it says on the tin. No book can be expected to contain every insect friendly plant and this book naturally, given the authors, has a honey bee focus, although the preface refers to it being "a book of plants for bees." It is good to see plants particularly visited by bumble bees are indicated, but there is no mention of solitary bees which are such important pollinators and vital within the ecosystem.

There is some useful advice such the recommendation to choose single rather than double flowered cultivars which often lack nectar and pollen having been bred for showy extra petals rather than the reproductive flower parts.

The lists of plants "exclude most crop plants, most fruits and all very invasive plants that are difficult to control. I was surprised to see *Pentaglottis sempervirens* (green Alkanet) included as, although I have a big enough garden and along with many insects I love the blue flowers, it is a thug which self-seeds freely so can take over if you turn your back on it



The thug that is Green Alkanet

Conversely there is no mention of the wild *Lamium album* which is very popular with the bumbles in my garden as evidenced by the insect counts I do for the National Pollinator Monitoring

Scheme. I don't have a problem controlling it, but I do understand not everyone wants an untamed style of garden!

Maybe it's just as well that the non-native common garden plant Lamium galeobdolon subsp. argentatum is not included. I inherited this plant in my garden and although it is also very popular with the bumbles, as the charity Plantlife points out "Once this species gets into the wild, it rapidly spreads and carpets the floor to the exclusion of other plants. The smallest stolon fragment with just one pair of leaves can grow into a new colony, and stolons break readily if the plant is pulled up. It's usually found in shady habitats such as woodland edges, hedgerows, roadside banks and stream sides. It is increasing rapidly in the wild and beginning to impact sites at which species of conservation interest grow; in a recent survey it was found at the majority of Spreading Bellflower *Campanula patula* sites visited. This species is listed on Schedule 9 of the Wildlife and Countryside Act in England and Wales therefore it is also an offence to plant or otherwise cause to grow these species in the wild." So be warned, don't let it escape and wield the garden fork when necessary! We gardeners need to be aware of such risks to our native plants.



Keep a close eye on this Lamium galeobdolon

In my view no excuse is needed to encourage gardeners to grow a few more wild flowers even if they are "weeds" to some! I quote, "Most entries here would be regarded as weeds outside the wild garden". Maybe it reflects the attitudes of gardeners around the time of writing, but I would argue that perhaps the term weeds leads to a negative view beekeepers should try to challenge, given the decline of all pollinators and recent rewilding ideas such as "no mow". Initially I was somewhat confused by my copy of the book (what no *Lamium purpureum* in the wild flowers section?) until I realised half the pages were missing! Northern Bee Books have kindly sent a replacement with the full 52 pages which does indeed include the missing red dead-nettle! (And sections on climbers, trees and shrubs and a reading list.) Oddly the font in the replacement book was different and looked a little dated compared with the first copy.

I found the sideways layout rather awkward. The format is a set of tables of plant names in sections including a good range of plant types such as herbaceous, herbs and bulbs, corms and tubers, with brief descriptions and cultivation requirements so if you are looking for this information it would be a useful addition to your library. Free and perhaps more up to date resources can be found on websites such as the Royal Horticultural Society (Plants for pollinators), The Bumblebee Conservation Trust and of course the BBKA.

Marian Stephens Head gardener, chief insect recorder and deputy beekeeper in Trimley St Mary

500 stings and counting...

There's been a revelation! I really don't know why it took so long but it's finally happened. That massive piece of the beekeeping jigsaw just slotted into place.

Last year was all about keeping to regular 7 day inspections and dealing with queen cells immediately rather than knocking them back in the hope of dissuading the colony from swarming. Thanks to assiduously requeening all my grumpy colonies last year, this year's inspections have been a delight and makes beekeeping the pleasure it ought to be.

Most beekeepers will have found that it was a very swarmy season and my bees were no exception. Thankfully regular inspections and plenty of spare nuc boxes kept everything under control - for a while anyway. I reckon 30 of the 34 colonies that came through the winter attempted to swarm.

Over the winter we had Jamie Ellis give a talk on using nucs in beekeeping operations. I've used

them for the last few years, but this talk made it clear I'd been ignoring a golden opportunity. Having a nuc or two building up in each apiary offered so many opportunities - taking out frames of sealed brood out to build up growing colonies; using the nuc 'en bloc' to replace the queen in a swarming colony; using bees from the nuc to make up mating nucs. It all made for the honey production colonies to do well. I'm up about 50% on honey yield this year compared to last.

There's hope for me yet.

Barry Crabtree

Musings on a funny old year 'Tits and other topics'

It is a traditional ritual that UK beekeepers and gardeners remark "it's been a funny old year" – this year more than most. Never mind Covid, what has been happening with our weather, flora and fauna? A late spring - the usual vagaries of British weather or more extreme because of climate change?

The Met Office reported March was slightly warmer than the long-term average, but UK temperatures in April and May were below normal.

May's average maximum temperatures were among their lowest ever recorded until the last week of the month when the warm bank holiday weekend shifted May's average figures away from historically low figures (don't we know it - cue swarms!) The average maximum temperature reported in the month for the UK was around 1.5°C lower than the long-term average and both minimum and mean temperatures were well below normal, with some unusually late frosts.

April was the fourth driest on record, but rainfall was well above the long-term averages for the month in May, even in notoriously dry Trimley St Mary, thanks largely to the southern-shifted jet stream inviting prolonged periods of low pressure. Compare and contrast spring 2020 when the UK recorded its sunniest spring ever and we had endless sunny summer days.

How did all this affect nature? The British Trust for Ornithology (BTO) for whom I record weekly, reported on 21st May:

"The past week saw a continuation of previous weeks' weather with low pressure systems coming in off the Atlantic – more akin to what would be expected in late autumn. Cold temperatures and unfavourable wind directions continued to keep migration at a trickle with no big arrivals of migrant species noted. The BirdTrack reporting rates for both House Martin and Swallow took a dip last week with the reporting rate for Swift also below average, possibly due to some birds having not arrived but also due to continental breeding birds not passing through Britain and Ireland as a result of the lack of south or south easterly winds. "

There were BTO Garden Birdwatch reports of early nesting attempts by Robin, Blackbird and Collared Dove in February and early March. Early attempts may fail because of a change in the weather with chicks getting chilled or parents being unable to bring in enough invertebrate prey.

When successful, early breeding can bring benefits for the fledglings, but this year many observers reported the failure in particular of Blue and Great Tit nests, at the chick stage. This is often caused by starvation rather than predation.

Blue, Great, Long Tailed and Coal Tit usually lay only one large clutch of at least 8 -12 eggs, although if they all die they may try again. The Blue Tit female doesn't brood the eggs till the whole clutch is laid, so the chicks will all be the same age, unlike birds such as Jackdaw which brood from the first egg so chicks are of different ages enabling the survival of at least the eldest in hungry years. If food is in short supply for Blue Tit chicks they may all die. Being birds of deciduous woodland they time their breeding so the peak demand for food for growing chicks coincides with the peak in moth caterpillars which will have emerged to take advantage of the new flush of leaf growth. Such caterpillars are less abundant in gardens than woodland and this cold wet spring it is likely there were fewer than usual overall. With a better year next year Blue Tit numbers should recover because of their large brood size, but disruption for successive years could threaten their status as common birds. The BTO will be studying the nesting bird data hoping to understand the longer term implications of

climate change (there is already evidence of many species laying eggs a week earlier than in the 1960s), and increasing urbanisation.

From my own observations it would be unwise to read too much into the numbers and timings of the birds, insects, mammals and amphibians I have been recording weekly for the BTO since 1995. Scientific conclusions demand computing power and large numbers of records over time from many sources. However, anecdotally my impression was that some species were later this year. For example I saw the Orange Tip butterfly in mid April last year and not till nearly a month later this year.

Some species seem to be in much lower numbers, for example I saw 10 Azure Damselflies at one time in our pond in May 2019 and 11 last year, but only 3 in June this year.

This year the Buff-tailed bumblebee numbers stayed low at around 2 or 3 at one time till late July when I saw 10, whereas in previous years I was seeing numbers over 50 by then. I was relieved to count 73 in the garden this morning (plus a Carder, two Red-tails and 3 Early Bumbles) with the insect favourite lavender still providing its slightly late bounty. (Also a Bee-wolf hawking successfully for one of our girls – fair enough, it was an impressive strike and only one. We must respect and protect our insect biodiversity, except perhaps wasps when it gets to late summer!) So it seems the Buffs have caught up. I had been concerned that overwintering queens in their burrows may not have survived the rain and later spring temperatures. Not surprisingly this year I have also seen far fewer Southern Cuckoo bumblebees which parasitise Buff-tail nests, but maybe they will catch up too as Buffs can have more than one brood, if they don't run out of summer time.

Ah, the traps of drawing conclusions about correlation and causation... maybe the figures were skewed by me being away and not recording during a crucial week, or maybe it really was the unforgiving weather. We'll see, but maybe late summer 2020 will turn out to have lower counts than this year as it was so very hot and dry with a subsequent reduction in nectar as we know to our cost in honey production. It was particularly poor here on the coast where we often miss the showers enjoyed by those further inland. The late spring certainly reduced our 2021 spring honey crop such that we left them what they had slaved over and will take only a summer harvest this year – or was it the lack of local rape seed fields? I hope you have fared better.

Marian Stephens 16.08.21

Addendum: as I sat eating lunch today there was a large flock of tits in the garden, mostly impossible to identify as they raced from distant tree to tree hiding in the foliage, but there were at least 9 Blue Tits and a Great Tit so either in denial of my low summer counts they managed to succeed in spite of the poor spring or maybe they had a second brood. Nature is resilient, but who knows how long it and particularly niche specialists, will survive climate change?

Flowers feel when bees are near and emit more scent

Flowers can sense when a bumblebee is nearby and release a burst of perfume to attract more insects, scientists have found.

Bees release a tiny electrical charge when they come into contact with petals. Dr Clara Montgomery, of Bristol University, found that shortly after contact was initiated, the plant actually expelled more perfume than normal. "Flowers have a limited supply of these scents, so it makes sense they only release them when their pollinators are around" Dr Montgomery said. "Essentially, it is only worth advertising when you know you have an audience. Other cues they might use, such as daylight or temperature, can be unreliable."

The electrical charge on a bumblebee is 130 picocoulombs (pC) and in expericents it took 600 pC, or five visits, for a violet petunia to be triggered into emitting an extra dose.

Instead of relying on bees to conduct the experiment, the researchers used nylon balls charged with electricity. Flowers touched with the substitute bees jettisoned twice as much perfume as normal but those contacted by a non-charged object were unaffected.

The Study is published in the journal: The Science of Nature.

Joe Pinkstone, Science correspondent, The Telegraph

Box House Beekeeping Supplies

In East Bergholt, Suffolk - for the local supply of hives, frames and foundation, tools and other equipment for keeping bees. Open by arrangement please email or telephone Paul White to discuss your requirements. 01206 299658 or 07768 634038. www.box-bees.co.uk; email: sales@box-bees.co.uk

Richard Martin Beekeeping Supplies

A large range of stock including: Hives in the flat, WBC, National and Commercial; Frames and foundation, honey jars, buckets, tools, bee suits, veils and gloves.

> Agent for Thorne's of Wragby Little College Farm, Creeting Hills, Creeting St Mary. IP6 8PX

Opening hours: 1 April - 30 Sept 4pm - 7pm Mon - Sat. At other times please call on 01449 720491

Wed 6th Oct 7:30 pm	Microscopy for beekeeping Gordon Brown Scout Hall, Twelve Acre Approach, Kesgrave, Ipswich IP5 1JF	Bring along some pollen & we can have a look at it there will be time for hands-on. Why a beekeeper should have a microscope Basic principles of microscopy – why magnification is a relatively minor consideration Different types of microscope – there's lots more than you might imagine! What to look for in a microscope New or used, which one to go for and why. All the extra bits you need – I have a room full of kit, do you really need all that stuff? How to set up a microscope How to maintain a microscope – especially what you shouldn't do! Other things you can use a microscope to look at And finally a list of reasons to give your partner for buying yet another microscope, and how to sneak it into the house without being noticed
Tue 12th Oct 7:30 pm	Beginners beekeeping Barrie Powell	Meets on the SECOND Tuesday of the Month, starting October at Barrie Powell's house. Confirm with Barrie on beepowell.powell@gmail.com
Wed 20th Oct 7:30pm	Felixstowe Beekeepers meetup (all welcome!)	Third Wednesday of the month at Kirton Recreation Ground Pavillion £2 per head to cover room & refreshmments.
Wed 3rd Nov 7:30 pm	Sandra Gray National Bee Unit Scout Hall, Twelve Acre Approach, Kesgrave, Ipswich IP5 1JF	In person

Upcoming Meetings

Tue 9th Nov 7:30 pm	Beginners beekeeping Barrie Powell	Meets on the Second Tuesday of the Month, starting October at Barrie Powell's house. Confirm with Barrie on <u>beepowell.powell@gmail.com</u>
Wed 17th Nov 7:30pm	Felixstowe Beekeepers meetup (all welcome!)	Third Wednesday of the month at Kirton Recreation Ground Pavillion £2 per head to cover room & refreshmments.
Wed 24th Nov 7:30 pm	Derek Mitchell "Ventilation, the why and why not."	via zoom The history of why hive ventilation became fashionable and the science or lack of it behind it, then how engineering and honeybee research now suggests the opposite.
Wed 1st Dec 7:30 pm	Winter Meeting Wax work? Scout Hall, Twelve Acre Approach, Kesgrave, Ipswich IP5 1JF	
Tue 14th Dec 7:30 pm	Beginners beekeeping Barrie Powell	Meets on the SECOND Tuesday of the Month, starting October at Barrie Powell's house. Confirm with Barrie on <u>beepowell.powell@gmail.com</u>
Wed 15th Dec 7:30pm	Felixstowe Beekeepers meetup (all welcome!)	Third Wednesday of the month at Kirton Recreation Ground Pavillion. £2 per head to cover room & refreshmments.
26th Jan 7:30 pm	David Evans (theapiarist.org) Queen rearing	Via Zoom.

If you have any comments, suggestions, articles you'd like to see in the newsletter please contact me at <u>barry.crabtree@gmail.com</u>

Thanks to all those who've contributed this quarter. It's really appreciated.

Happy Beekeeping