



Newsletter

Volume 5 – May 2019

Editor: Norman Dickinson

BRIGHTON AND LEWES DIVISION OF THE SUSSEX BEEKEEPERS ASSOCIATION

www.brightonlewesbeekeepers.co.uk

A Promise of CAKES REQUIRED plus help on stall For Bee Market At Heathfield

SATURDAY 18th MAY



Please inform

Hilary osmans.home@btinternet.com

01273 813045 or 07713 532285

of your intention to donate or help on the stall.

In this issue:

Asian Hornet Action Team (AHAT)	2
Brighton & Lewes Miscellany	2
Amanda Advises	3
SBKA Bee Market	4
The Nucleus Method of Swarm Control	5
Couple of articles from the New Scientist	5
Honey Bee Colonies More Successful by Foraging on Non-Crop Fields	6
Photo Corner	7
Officers of the Division	9
Divisional diary	9
Regional and Seasonal Bee Inspectors	9

Forthcoming winter meetings:

- No further winter meeting until October 2019

Forthcoming summer out-apiary meetings:

- See rear panel

In next months edition:

- Amanda Advises
- Asian Hornet Action Team
- Hardy Honeybees
- Researchers decipher and codify the universal language of honey bees

Asian Hornet Action Team Report by Manek Dubash

Spring is now well underway and there have been glimpses of what summer might be like. Despite that – and we know that the Asian hornet, *Vespa velutina*, is likely to emerge after a few days with an ambient temperature of 123 degrees or above – there have so far been no sightings of the beast on the UK mainland.

The Channel Islands, Guernsey and Jersey in particular, are another matter however, and here we must be grateful to Jersey beekeeper Bob Hogge who came over to report on his methods of finding, identifying and tracking the insects to their nests, with the aim of helping us prioritise our efforts when the time comes.

Several Brighton & Lewes beekeepers went to Uckfield's Civic Centre about a month ago to hear Bob talk to a packed room about the experiments he instigated to lure *V. velutina*, and about how to find their nests by tying feathers to trapped insects – nests which are,

as he demonstrated, incredibly difficult to spot from ny distance away.

Long story short, his key point was that the engagement of the public's eyes and ears was crucial to the swift destruction of nests, before they had a chance to spawn new colonies. He had one further piece of advice we can all, as beekeepers, take advantage of: let brambles grow around your hives as it protects the bees by forcing them to take unpredictable paths to and from the hive.

A few members of our association are planning a trip to Jersey later this year to see for themselves how local beekeepers cope, so we'll report back their findings.

Invasive species inquiry

One more news snippet: the House of Commons Environmental Audit Committee has launched an inquiry on the impacts of invasive species and their management. The aim is "to identify the scale of the

problem and assess how well prepared we are to cope with it."

The launch press release went on: "We hope our inquiry will send out an alert to those most likely to come into contact with invasive species whether in farming, canoeing, fishing, walking, or even in their back garden. Identifying and recording sightings or clearing invasive species is important to reduce the impact on our native environment."

The RSPCA has made a submission, though it didn't mention Asian hornets. You can find out more here, including how to make a submission yourself: <https://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/inquiries/parliament-2017/invasive-species-17-19/>

Be quick if you want to make a submission as the deadline is 30 April 2019.

Brighton & Lewes Miscellany

Tony Robinson has sent me this youtube link demonstrating the art of collecting a swarm using a crowbar! You may believe it or not, however there are some interesting photos that follow the video.

<https://www.youtube.com/watch?v=vHGxeewY03Y&feature=youtu.be>

A number of apiary sites have become available as follows:

- ◆ Kenwards Farm, Lindfield 27 acres of partly wooded landscaped garden
- ◆ 2 acres at Wivelsfield Green
- ◆ Offer of a nursery for bees at Poynings
- ◆ Plumpton Green a large garden
- ◆ Spatham Lane, Ditchling
- ◆ 5 acres in Streat (In the National Gardens)

All enquiries to Hillary Osman on 01273 813045
secretary@brightonlewesbeekeepers.co.uk

Amanda has sent a link to an article seen in a recent edition of The Guardian. I will say no more, but you must read it and form your own opinion! Ed.

https://www.theguardian.com/environment/2019/apr/24/bee-saviour-sugar-cards-could-help-starving-bees?utm_term=RWRpdG9yaWFsX0d1YXJkaWFuVG9kYXIVS19XZWVrZGF5cy0xOTA0MjU%3D

Recently received plea from a university student

Dear Hilary, I am a masters student at the University of Sussex currently studying chalkbrood in relation to hygienic behaviour.

I am assessing the amount of naturally occurring chalkbrood in hives of different levels of hygiene. Somewhat unfortunately we have too many highly hygienic colonies within the university apiaries and I am therefore in need of some moderate to low hygienic colonies.

Would you be able to contact your members or perhaps place a short

article in a newsletter etc. asking for volunteers as this would be incredibly useful for my research.

For those who do wish to volunteer a hive or two, I would simply be inspecting the frames for chalkbrood and then would later test how hygienic the colonies are.

If any beekeepers are interested in finding out how hygienic their colonies are then this may be of interest to them.

If you would like to talk about this in more detail or have any questions feel free to email me at rt300@sussex.ac.uk or call me on 07801434514.

Any help would be greatly appreciated as until more hives can be sourced I cannot begin my research.

Best Wishes, Rosie Thomas

Amanda advises...

I wonder whether any bees have swarmed so far, I expect the lovely Easter weather brought a few out. I did hear of a bunch of bees found under a mesh floor at the end of March, which sounds a bit like an attempted swarm returning to a clipped queen. I was thankful to be able to check mine thoroughly when we had a couple of earlier spells of nice weather in Feb and one in late March. In fact I experienced what was probably my first honey flow in late March and I put a super on every colony. However, in the nearly three weeks of cold wind, rain, frosts and temperatures afterwards it was too cold to open them and I think they ate most of it. Indeed, I was a little concerned about their stores as I had taken off one or two full frames of surplus mixed winter stores from several, prior to adding the super (so it would not contaminate the honey) and I knew their populations had expanded greatly. I had to give my lightest colony a contact feeder and returned its two frames of winter stores.

In spite of the cool temperatures, there was a lot of forage around me and bees were going out, although still collecting a lot of water (they were all over my damp pot plants), which implies consumption of stores rather than using incoming nectar. They will keep visiting an open water butt and drowning in it. I draped grass and twigs over it but they still fell in until I draped a bit of net curtain and that seems to do the trick. In the cold weather I found 7 which had fallen in within two hours since I last checked but two feebly moved a leg when fished out, so I put them on tissue in a pot in the boiler room and 15 minutes later they were all buzzing around and flew off strongly when released. It gave me a warm buzz to see them go. Also in the cold wind weather I found nearly 100 chilled outside two hives; a night in a bucket in the boiler room with a drizzle of honey water and they were all ready to go next morning. A few bees crawling outside can indicate a virus and the bees have committed altruistic self-removal

to die away from the colony, so judgement is required and I did not put them back in the hives, rather let them fly back themselves.

In March when I put on a super, which they have filled with brood, I also took the opportunity to put a shallow frame of drone foundation at the edge of the brood nest in my best colonies. I was amazed to find about five days later that this had been all drawn out and had eggs already. When I was at last able to check just before Easter when the weather improved, I was relieved to find they were not making queen cells although some were congested and all required another super. Three days later, on Easter Sunday, two had a couple of charged queen cells. So I am now shifting to swarm control. I found some colonies had filled the space between the brood boxes with brace drone brood, because they had no room, this broke when the boxes were separated. I removed this brace to avoid squashing bees when I put the super back on.

I am now checking principally for space for brood expansion and space for nectar storage and queen cells. I have already given them a thorough brood inspection for disease and am just finishing off a the varroa in couple of colonies which missed the full Oxalic Acid vapourisation, using icing sugar. Swarm prevention needs to be in place and control equipment should be ready just in case, bait hives out. Prevention techniques which seem to work for me - some of the time - include making sure all their frames are useable by removing old pollen clogged or damaged frames (think about this in the autumn); anticipating their needs for space for brood and nectar storage before they need it, by judging the weather and nectar flow – easier said than done! I thought I was on top of it but yesterday had to put yet another super on 5 of them just three days after giving them a super! This is best using drawn comb if it is to prevent swarm preparations, and it can be put between the brood and the rest of the supers. As I no longer

use queen excluders, they can choose whether they wish to fill it with brood or nectar and acts as a swarm prevention measure. Or at least it delays swarm preparations and I find that queen cells are often started between the brood boxes, so it is usually sufficient to get an idea of their intentions just by lifting one side of the super and looking along the bottom bars, instead of going through each frame. I have now used up most of my drawn comb and must prepare some frames with foundation in the next day or two. Boxes of foundation I generally put on top or under a nearly full super in a nectar flow. Finally, have you tried checkerboarding, to prevent a band of capped honey forming above the brood nest which would otherwise makes them think they have achieved enough stores and can then start on reproductive swarming? You alternate a frame of nectar with empty drawn frame. It does not work with foundation, which acts as a barrier. There is a good description on the Honeybee suite website. I also try to rear queens, nucs etc from my colonies which supersede and not from colonies which try to swarm even though it might be easier. Last year less than 30% of my colonies started making queen cells and Control methods (artificial swarm, taking the queen off in a nuc etc), prevented any loss of swarms. I don't think I will achieve that this year as several preventative measures (anticipating super requirement, checkerboarding) rely on being able to inspect every week but the cold spell messed up that plan at a critical time and now they seem to be one step ahead of me.

Over the Easter holiday it was warm enough to bring out my solitary bees and I had dozens of Osmia squabbling over the holes in my home-made bee hotels. Two species, initially shiny blue males of one species waiting for females to hatch and then I saw some Red



(Continued on page 4)

(Continued from page 3)

Mason females. I might have to make some more hotels very soon! Also the mining bees have been busy in the lawn for several weeks, over Easter, I spotted a number of the parasitic Nomada bees which lay their eggs in these mining bee burrows. They are black and yellow striped and look a bit like small wasps; indeed the Nomada bees are quite difficult to distinguish from the little solitary wasps which are great little pest controllers; laying their eggs in caterpillars etc. They do move quickly though and are much less tolerant of an approaching arm with camera on the end than my honey bees which seem to get on

with business regardless. It is good to see that there have been some articles in the press recently about the adverse competition the increasing number of honey bee colonies have on our dwindling other pollinators in cities. It would be good if more people realised that to "save our pollinators" the answer is not to set up yet more beehives, but to plant more flowers and put up solitary bee hotels. The hive population in London, for example, is twice the recommended density to achieve a balance of all pollinators. Brighton is not far behind.

The fungicide chlorothalonil is to be banned by the EU in late April

to early May and expected to take effect about 3 weeks later. It has been found to be linked to declines in bees, by killing essential beneficial gut bacteria. It also harms amphibians and fish and possibly human DNA. Good riddance! However, the chemicals which Bayer is marketing as replacements for the banned neonicotinoids (sulfoxaflor and flupyradifurone) are apparently so similar to neonics that it is feared they could also be dangerous to bees and other insects especially when used in conjunction with fungicides. Out of the frying pan into the fire!

SBKA Annual Bee Market

Just 3 weeks to go for the SBKA Annual Bee Market, plenty to see, plenty to buy and lots of information available. See you there.

Come and see us at the
BEE MARKET

Heathfield Community College
Old Heathfield TN21 8RJ

Saturday 18 May 2019 - 10am to 5pm

Bees, plants and honey on sale Trade stands
Equipment auction Live bee show
Free parking Hot and cold food
Workshops Children's corner Mead-making
Great gardening ideas Talk on bee health

Everyone welcome - Admission £1
A Sussex Beekeepers' Association event

Sussex Beekeepers' Association Bee Market

Learn all about the fascinating world of bees!



To create their delicious product, bees operate one of the most complex yet slickest production techniques in the whole of nature.

Enter their wonderful world to see how these fascinating insects pollinate our crops and provide us with fine pure honey and beeswax. This is a great day out for adults and

children alike, with auctions of bees and equipment, bee-handling demonstrations, a special bee workshop for children and expert lectures.

Free parking, hot and cold food on sale along with plants, honey and trade stands with great ideas for your garden. Entry is just £1 per person. Bring the family!

Where to find us on Saturday 18 May



The Nucleus Method of Swarm Control Article submitted by Amanda Millar

As we enter the swarming season, this article from The Apiarist is most appropriate.

The full article can be found at <https://theapiarist.org/the-nucleus-method/> which includes photos and diagrams.

Ed

Almost all beekeeping associations – and most books – teach Pagdens' artificial swarm as the recommended method of swarm control. It is tried and tested and reasonably dependable. However it can be a bit tricky to grasp for inexperienced beekeepers.

At least part of the problem is you have two hives that look the same,

one on the original site, one adjacent. Conducted properly, the adjacent hive is moved to the other side of the original a week or so into the process.

Teaching this in a poorly lit, draughty church hall in late January, facing the audience with the inevitable confusion over left and right, and getting ‘new’ and ‘old’ hives mixed up, often bamboozles the beginner or the instructor !

Here's an alternative ... the nucleus method of swarm control.

General principles

This method is simplicity itself. When the colony looks as though it's preparing to swarm you remove the queen, some stores and some

bees into a nucleus hive.

This keeps the queen safe in case things go awry with the original colony.

You then return a week later and remove all but one queen cell in the original colony. The virgin queen emerges, mates, returns and starts laying.

A month or so after starting the original colony is headed by a new queen and you have a ‘spare’ building up in the nucleus box. You can overwinter this, sell it, give it away or – after removing the queen – unite it back with the original hive.

And that's it ... I said it was simple

Mr Apiarist .

A couple of articles from the New Scientist sent in by Gerald Legg

Eclipse didn't get the bees buzzing

NewScientist 20 October 2019

Bees suddenly went quiet during the solar eclipse that swept across north America in August last year. A set of 16 monitoring stations recorded them falling silent as the moon totally covered the sun. Candace Galen at the University of Missouri and her colleagues set up microphones in stands of flowers along the path of the eclipse, from Oregon to Missouri, to listen to bees. They found that as the moon started to move in front of the sun, the bees continued buzzing. But in the period around totality, the sound, created by the bees' wings as they fly, suddenly dropped off. “We had expected to see a reduction inactivity, but we thought that it would be gradual following the loss of light,” says Galen. “We didn't expect everything to go along as usual until totality.” The team recorded sound for 3 minutes – covering the period of totality that lasted 40 to 160 seconds depending on the location – and found that only one bee buzzed during those 3 minutes. It isn't clear whether the other bees

flew back to their hives, as they do at night, or whether they sheltered in flowers, as they do in inclement weather. “All we can say is what they weren't doing – they weren't flying,” says Galen.

Note from Gerald

On the 11th August 1999 – when Britain had its last total eclipse – I was in the garden taking photographs and also listening and watching the wildlife. One of the observations I made was the birds and insects going quiet and the bees not flying off home but resting on the flowers in the same way they do if there is sudden black cloud. Once the light returned they continued working.

Bees pass their maths exam with flying colours

NewScientist 16 February 2019

Honeybees seem to know their numbers. They have passed a test that requires them to add and subtract, although others doubt the insects are really doing this. In the test, Adrain Dyer at RMIT University in Melbourne Australia, and his colleagues first

showed bees a picture in blue or yellow depicting between one and five shapes. Then they were given a choice of two chambers, each with another picture of the same colour, but differing numbers of shapes, by the entrance. One chamber contained sugar solution as a reward. The other had bad-tasting quinine solution. If the original picture was blue, the bees had to add one to the number of shapes to choose the picture outside the sugar chamber. If the shapes were yellow, they had to subtract one. Fourteen bees went through the exercise 100 ties as training. In subsequent tests, they chose the correct answer 67.5 per cent of the time – significantly better than chance. But Clint Perry at Queen Mary University of London questions the idea that bees are doing arithmetic. He says if the bees simply choose the chamber picture most similar to the original picture – they could get 70 percent right. “The ability to add and subtract is a higher-level cognitive ability,” he says. “To claim an insect can do this is extraordinary and requires extraordinary evidence.”

Honey bee colonies more successful by foraging on non-crop fields

By US Department of Agriculture. Article sent in by Tony Robinson

Honey bee colonies foraging on land with a strong cover of clover species and alfalfa do more than three times as well than if they are put next to crop fields of sunflowers or canola, according to a study just published in *Scientific Reports* by an Agricultural Research Service (ARS) scientist and his colleagues.

Managed honey bee colonies placed from May until October next to land in the U.S. Department of Agriculture Conservation Reserve Program (CRP) in North Dakota were more robust with better colony health including higher numbers of bees and increased ability to turn nectar and pollen into vitellogenin—a compound that plays a number of roles including serving as the base for producing royal jelly, which bees use to nurture larvae and turn larvae into queens.

Vitellogenin also is a critical food storage reservoir for honey bee colonies, and a colony's success in the spring depends on total vitellogenin reserves carried by specialized bees over the winter. Vitellogenin prolongs the lifespans of queens and forager bees as well as strongly influencing key behaviors that increase colony survival such as determining how old bees are before they begin foraging and whether they tend to gather nectar or pollen.

After spending six months foraging on CRP land and then overwintering, more than 78 percent of the colonies were graded A, the highest level commanding the highest price for pollination services in January, meaning a colony has six or more frames well filled with bees, capped cells and bee brood (larvae).

With colonies kept near intensely cultivated fields and then overwintered under the same circumstances to the CRP apiaries, only 20 percent could be rated Grade A and 55 percent were less than 2 frames or dead.

Page 6

"With California almond growers having paid an average of \$190 per Grade A colony in the 2018 almond pollination season, the need for beekeepers to have access to land that has diverse and substantial nectar and pollen sources is obvious," explained ARS research microbiologist Kirk E. Anderson. Anderson is with ARS' Carl Hayden Bee Research Center in Tucson, Arizona.

Anderson and his team, including ARS molecular biologist Vincent Ricigliano, also profiled several molecular colony level biomarkers, looking for a way to simplify how

decline except for forage resource, highlighting the importance of pollen and nectar quality provided by the area surrounding the apiary. While the link between the quality of forage and colony health is generally known, this study highlights the value of agriculturally marginal (CRP) landscapes for honey bee production in a region that hosts close to half the U.S. managed bee population (about 1 million colonies) during the summer.

"We've also shown that the benefits of high quality forage such as that provided by CRP land carries right through the overwintering period and leaves bees in the best shape to



Land in the USDA Conservation Reserve Program showing diverse sources of nectar and pollen for honey bees. Credit: ARS-USDA

researchers can measure how well a honey bee colony is doing in different foraging conditions while overcoming individual bee variation.

They found that higher levels of vitellogenin stores were the best predictor of colony size after winter. Higher levels also were associated with increased production of antioxidant enzymes—which reduce cell damage—and greater production of antimicrobial peptides, which contribute to disease resistance.

The researchers eliminated other potential common causes of colony

build up their numbers before being needed to pollinate almonds in February and early March," said Ricigliano.

Our results provide land managers and scientists with methods to evaluate the relationship between bees and the landscape. For beekeepers, it provides a basis for making decisions about where to put their apiaries for the summer and fall after crop pollination ends so that the colonies will be in a position to build up robust healthy numbers in time for the migration to California for almond pollination, Anderson added.

Photo corner : Top three submitted by Amanda Millar, bottom photo from Tony Robinson



**Two species of Osmia the Red Mason
and probably the Blue Mason**



The Red Mason Bee



**A cuckoo Nomada bee just leaving a
mining bee nest where it has sneaked a**

People who harvest honey; are they?

- A) - piarists**
or
- B) - keepers**

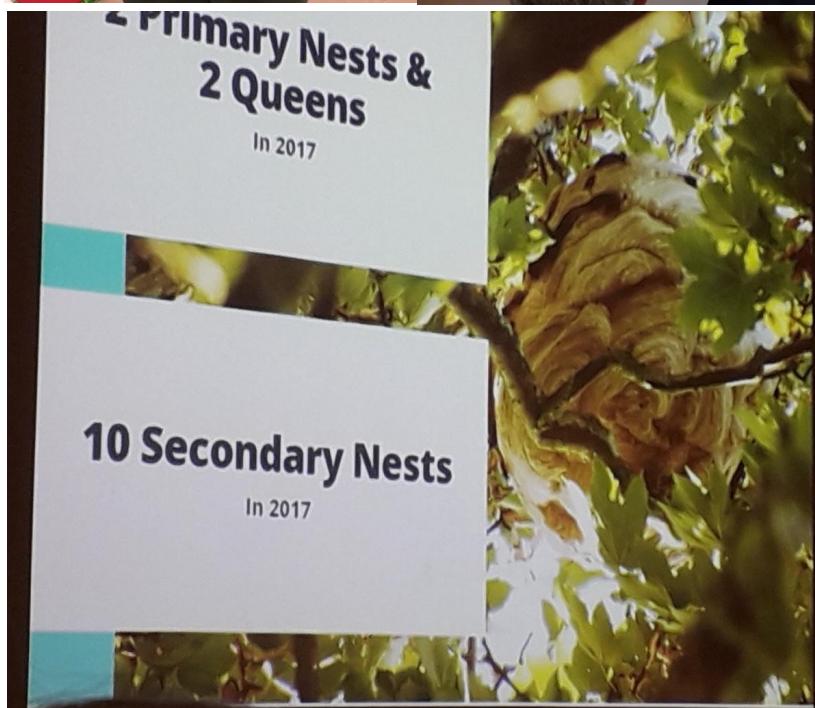


More photos



Above: Bob Curtis has submitted two photos of an Apoidea ravaged by mice? Store your Apoidea's carefully!

Below: Bob Hogg's talk on the Asian Hornet held on 26th March at the Civic Centre in Uckfield



B&L Divisional Diary 2018 / 2019

Outdoor meetings:

Meetings are held on Saturdays or Sundays as noted below, between April and September. Unless otherwise stated all meetings will start at 1:30pm and are subject to weather permitting. Location maps are on the website in the member's section.

Summer programme:

~~Sun 31st March: Grassroots - Working party.~~

~~Sun 7th April: Barecombe - Spring cleaning in the apiary.~~

~~Sat 13th April: Hove - CANCELLED~~

~~Sun 28th April Cooksbridge - Building supers & frames.~~

~~Sat 11th May: Barcombe - Swarm control.~~

~~Sun 19th May: Newick - Queen rearing.~~

~~Sat 1st June: Hove - What do I see in my hive?~~

~~Sun 23rd June: Grassroots - Supering~~

~~Sat 6th July: Hove - TBA~~

~~Sun 21st July: Grassroots - Harvesting Honey~~

~~Sun 1st Sept: Grassroots - Winter Preparations~~

~~Sun 8th Sept: Newick - B&L annual BBQ~~

Dates for your diary:

~~2nd March: SBKA AGM and Spring Meeting, Peredur Centre, East Grinstead, RH19 4NF~~

~~12th April to 14th April: BBKA Spring Convention, Harper Adams University, TF10 8NB.~~

~~27th April: WSBKA Annual Bee Market and Auction, Brinsbury College, Pulborough.~~

~~18th May: SBKA Annual Bee Market in Heathfield.~~

~~6th to 8th June: South of England Show, Ardingly.~~

~~3rd August: Rottingdean Fair~~

~~15th September: Westdean Fair~~

Officers of the Division

President: Amanda Millar

Chairman: Heather McNiven
E: chair.blbees@btinternet.com

Vice-Chairman/Treasurer/Membership
Secretary: Pat Clowser
5 Wivelsfield Road, Saltdean, BN2 8FP
T: 01273 700404
E: patricia.blbees@hotmail.com

Hon Secretary: Hilary Osman
Holly Tree Cottage, Norlington Lane,
Ringmer, BN8 5SH
T: 01273 813045
E: secretary@brightonlewesbeekeepers.co.uk

Meetings Secretary: Mary King

Swarm Coordinator: Sue Taylor
M: 07999 987097

Webmaster: Gerald Legg
E: gerald@chelifer.com

Newsletter Editor: Norman Dickinson
34 Abergavenny Road, Lewes, BN7 1SN
M: 07792 296422
E: editor.blbees@outlook.com

Librarian: Dominic Zambito
E: librarian.blbees@outlook.com

Education Co-ordinator: Amanda Millar
E: amanda.millar.rf3@btinternet.com

Asian Hornet Action Team Co-ordinator:
Manek Dubash
T: 07762 312592
E: blbka.ahat@gmail.com

Out-Apiary Managers:
"Grassroots": Amanda Millar
"Knowlands Farm": Heather McNiven
"Hove": Mary King

SBKA County Representative:
Bob Curtis

National Honey Show Representative:
Norman Dickinson

The Brighton and Lewes Division of the SBKA cannot accept any responsibility for loss, injury or damage sustained by persons in consequence of their participation in activities arranged.

Contributions to your newsletter

Contributions for the newsletter, including photos can be sent, preferably by email, to the editor. Please refer to panel above for details. Please limit to a maximum of 900 words. Copy to be sent no later than the 12th of the month preceding the month of publication. Photos etc. for the website should be emailed to our Gerald Legg

Regional Bee Inspector: Sandra Grey Mobile: 07775 119430 email: sandra.grey@apha.gsi.gov.uk

Seasonal Bee Inspector: Diane Steele Mobile: 07775 119452 email: diane.steele@apha.gsi.gov.uk

QR Link to B&L Website

