Brighton & Lewes Beekeepers

Newsletter January 2015

BRIGHTON AND LEWES DIVISION OF THE SUSSEX BEEKEEPERS ASSOCIATION
www.brightonlewesbeekeepers.co.uk

Next meeting - January 21th, AGM ...

Brighton and Lewes Beekeepers
Annual General Meeting 15th January 2014

AGENDA

1. **Apologies**
2. **Minutes of last meeting**
3. **Matters arising**
4. **Vice Chairman's report**
5. **Treasurer's Report**
6. **Out apiary reports – Barcombe, Devils Dyke, Plumpton, Grassroots, Whitelands, Stanmer**
7. **Election of officers**
8. **Any other notified business**
9. **Date of next meeting**

...folowed by Nikki Gammans – Bumblebees and pollination

We had a talk recenntly bt David Goulson of Sussex Universities LASI. Those hearing the talk will recall that David was instrumental in setting up the Bumblebee project. Dr. Nikki Gammans (to give her full title) leads the project and was recently instrumental in leading the reintroduction of the Short tailed bumblebee to the Romney marshes. Nikki is a fluent knowledgable speaker and is sure to be of interest.

Potential effects of climate change on pollination

Amanda Millar thought that members may be interested in this article.
Potential Disruption of Pollination in a Sexually Deceptive Orchid by Climatic Change
Summary

Warmer springs advance many phenological events, including flowering time in plants and the flight time of insects [1]. Pollination by insects, an ecosystem service of immense economic and conservation importance [2], depends on synchrony between insect activity and flowering time. If plants and their pollinators show different phenological responses to climate warming, pollination could fail. Information about the effects of warming on specific plant-insect mutualisms is difficult to obtain from complex pollination networks [3]. In contrast, the extraordinarily specific deceptions evolved by orchids [4] that attract a very narrow range of pollinators allow direct examination of the potential for climatic warming to disrupt synchrony. Here we show that a sexually deceptive orchid and the solitary bee on which it depends for pollination will diverge in phenology with increasing spring temperature. Male bees inadvertently pollinate the orchid flowers during pseudocopulation. Analysis of museum specimens (1893–2007) and recent field-based records (1975–2009) showed that flight date of the solitary bee Andrena nigroaenea is advanced more by higher temperatures than is flowering date in the deceptive orchid Ophrys sphegodes. Male bees emerged slightly earlier than females, which attract male copulatory attentions away from the deceptive flowers. Warming by as little as 2°C increased both the probability of male flight and the proportion of females flying in the bee population before orchid flowering; this would reduce the frequency of pseudocopulation and thus lower pollination success rate in the orchid. Our results demonstrate a significant potential for coevolved plant-pollinator relationships to be disrupted by climatic warming.

For full article copy and paste
http://www.sciencedirect.com/science/article/pii/S0960982214013426

Last meeting - Quiz

The advertised speaker was unable to come to the meeting. Fortunately Amanda Millar agreed at short notice to arrange a quiz. The questions were many and varied with some good humoured banter at a few of them. The winner of the first prize was Sue Taylor, with Hilary Osman second and Alison Warner in third.

There followed our usual festive tea and coffee with lots of super seasonal tidbits brought in by members.

Everyone enjoyed the seasonal evening. Once more thanks to Amanda for her well organised entertaining quiz!

Amanda advises

There are few new jobs I can suggest for January apart from those I mentioned last month. Thankfully the shortest day is now past and my crocus leaves are already through. The queen will start to increase her laying in January, so if you still intend to use oxalic acid don't leave it too long. There are several factors governing the triggering of increased brood rearing, including availability of pollen, weather, temperature, age of queen, number of nurse bees, strain of bee and disease level. Surprisingly, daylight length is not an important factor for bees, although it probably is for my crocuses. In fact there is considerable concern that with rapid climate change insects and their plants will become unsynchronized as the factors triggering the emergence of the insects are different from those triggering flowering. Some research in Scotland suggests that the optimum overwintering colony size is 11,000 in November which is about 8 seams. As our winters are less cold in Southern England we can get away with fewer bees and 5 frame nuclei can overwinter well. Survival depends on having well fed bees fattened by good quality pollen in the autumn, with lots of pollen stores available for early brood rearing and sufficient bees to maintain the 35 degrees centigrade necessary to rear the brood. Bees will be dying as winter proceeds and in cold weather (January/February) bees may be reluctant to leave the cluster to remove dead bees which can build up and block the entrance, do keep checking and pick them out with a strand of straw. If the bees have high virus or varroa load they will die more quickly and the cluster reduces in size. That is why I favour early treatment of varroa and doing follow-up treatment in Oct/Nov rather than leaving it until Dec/Jan Oxalic treatment.

On 20th December I went to the talk by the Canadian commercial beekeeper for the Hastings and Rother Division. He said several things which got me thinking. One was that when he started beekeeping with an outfit 20 or more years ago, they often got 380 lbs of honey per hive. What was our average for the last few years? In SE Eng in 2010 it was 34 lbs, in 2011 - 29 lbs, 2012 - 7 lbs, 2013 - 29 lbs, this year 34 lbs. They also ran a double queen system on Langstroth which made very big colonies - all from 1 kg package of bees from the USA in the spring and a new queen. How many of us can expect large colonies from a nucleus or swarm the same year? He did say that because they were a long way north they had long daylight hours when the bees could be active and they had hundreds of acres of red clover for them.

He now overwinters his colonies outside from November to April, but some beekeepers bring them indoors to climate controlled rooms at +3 degrees C. Packages cannot be imported from the States now because of disease risk and sometimes they lose 50-60% of their colonies over winter. They also need to take off all the honey and feed 20 kg sugar syrup instead because the winter is so long and intense that they cannot go out to defecate. So the low-residue sugar is the best option. They now use the darker bees (packages from NZ if necessary) as they overwinter much better than the yellow bees. He seemed to suggest only those outfits which did not run clean honey houses had a problem with small hive beetle. The less said about their attitude to AFB the better! I think on balance I would prefer our mild shorter winters. Mine were flying on 22nd December and I was able to icing sugar dust a couple with persistent mites. However, I do envy the huge honey crops and the rapid growth of colonies.

It is difficult to be sure of the reasons for the decline of wild bees, such as loss of preferred host plant because they are all rare now. However the pollen on museum specimens of wild bees in the Netherlands has been examined and research published in November indicated that this was indeed an important factor in their decline. Body size also was, indicating food limitation is important in their decline. Diet breadth and other potential factors such as length of flight period or climate change sensitivity were not important in explaining twentieth century bee declines.

Honey show lectures on the internet

Lecture given at the 2013/14 Honey Shows are now available on YouTube and Facebook at the following sites:-
https://www.youtube.com/channel/UCiOtIebcpY0Zqqma0H5wLYQ
https://www.facebook.com/nationalhoneyshow

For Sale

Pre loved Thomas 3 frame extractor

Suitable for up to 5 hives, this little machine is a gem. Hand operated with an integral 50kg settling tank. It will hold 3 shallow frames of any size tangentially. Approx. 400mm diameter, 870mm high. Offers £££ (Similar machine in Thorne's Catalog £720) Please contact Ian White 01273 48797 / 07875 663665

Recipes using honey - *Amanda Millar*

Apart from a honey glaze on roasted carrots and parsnips (olive oil, honey and Dijon mustard), and a lovely flat bread with chopped figs and goats cheese in it (and a little honey to get the yeast going) the only one with substantial amounts of honey is the 5-SEED GRANOLA from January 2015 Waitrose magazine. It was very easy, tastes nice and could have taken much more honey than the recipe indicates to help it to clump, it is not as sweet as bought stuff. You can vary the proportions and content to suit your taste, and store cupboard. It did not say what you do with the vanilla pod, but I see from the picture you just stuff it into the jar, ditto with the cinnamon stick I presume, so I just added a teasp of ground cinnamon.

200g Jumbo oats, 100g oatmeal, 75g each of pumpkin seeds and sunflower seeds and 25g each of golden linseeds, sesame seed and poppy seeds, 100g whole unblanched almonds roughly chopped, 1 cinnamon stick, 1 vanilla pod. ½ teasp sea salt flakes (I omitted this), 2 tablesp rapeseed oil (I only had hemp seed) 125g honey (or more!) 1 egg white beaten to peaks, 50g dates chopped, 50g dried pears chopped. For dried fruit I used about 150g mixture of sultanas, dried apricots, dried cranberries and dates.

Mix all but the dried fruit, Bake on parchment lined roasting tray at 170 deg C, turning everything half way. Scatter dried fruit over top but do not stir and bake 5 mins more until crisp. Cool in tray and store in airtight container for up to a month, presumably with the cinnamon stick and vanilla pod. I don't think mine is going to last the month, great on breakfast cereal, on ice cream, or just as healthy nibbling etc.

Photo: Waitrose magazine

Poor Science Harms Bees – Amanda Millar

I recently came across a couple of articles by Jon Entine who discussed some papers by a Chensheng Lu which were published in 2012 and 2013. In these papers Lu claimed to have solved the mystery of winter bee deaths i.e. Colony Collapse Disorder (CCD) and that agricultural pesticides and especially Neonicotinoids (neonics) are the cause of the imminent loss of honeybees – 'Beemageddon'. Lu's sensational papers captured the attention of the media and the public, the media hyped it up in headlines like 'New Harvard study proves why the bees are all disappearing'.

In fact it appears that Lu's papers are pretty dodgy and not what they seem and many of the world's top scientists have challenged them. First, Lu is a nutritionist not an entomologist and his co-authors are not scientists but beekeepers. He seems to have rested too heavily on the name 'Harvard' as it was not the prestigious Harvard University but just a Harvard School of Public Health. He also works for a branch of the American Organic Trade Association with a strong financial interest in disparaging conventional agriculture and neonics in particular. This conflict of interest has not been made public. His papers were not accepted by credible journals and he eventually got them published in one of the most obscure science journals in the world.

If this is not bad enough, Entine points out that honey bees are not disappearing; numbers of managed beehives in the States have been stable since the 1990's, and in the EU numbers have actually increased from 11 million to a fraction under 12 million colonies, so there is no beemageddon. He only used 18 hives in his study (12 treated and 6 'control') which is a small number, he also fed them neonics for 13 weeks which seems a long time. He claimed to use field-realistic doses but actually he started with low doses but after 4 weeks and the treated colonies seemed to be healthier than the control he increased the dose to 100 times a field realistic dose (giving 135ppb instead of commonly found 3ppb). It appeared from his results that a low dose of neonics actually inhibits Nosema which was why they appeared healther, but he did not mention this in his discussion. (Further research is required to see if this is really the case). Also his winter losses did not have all the symptoms of true CCD so does not demonstrate that neonics cause CCD.

So where does this leave us? A gullible media, public and politicians think bees are dying out when they are not. A kneejerk reaction by banning some neonic use in some circumstances will not necessarily help, as neonics are persistent and build up in the soil so we will see no benefit in just 2 years. Most research projects take 3 years to complete so the ban will be lifted before the results are published and we will be none the wiser. Farmers are inconvenienced and will probably use it as an excuse to put up prices and use far more hazardous pesticides which were used in the past. A bit of a mess all round.

Don't get me wrong, I don't like pesticides. I eat and grow organic food and am convinced that there are too many chemicals in our environment which cannot do any of us much good. There are enough sound scientific papers around to convince me that neonics are damaging to aquatic life, soil organisms, insects both beneficial and pest, which is adversely affecting birds and bats. Only 5% of the neonics on seed dressings is absorbed by the plant, the rest is washed into the soil and waterways. When people I admire such as Dave Goulson at Sussex University say that neonics are bad, I believe them. What is the answer? I don't know, but poorly designed, executed and advertised so-called scientific papers are bad for everyone. This is misinformation. If I see an interesting press release or headline I always try to find and read the paper of the research on which it is based. Sadly some scientists do not write well and I don't always understand how they reach their conclusions. Statistical analysis is not my strong point and when I wrote a few such papers I got an expert in biological stats to do my calculations for me, so some papers I feel are a bit of a headache. What can we do? Well, don't use Neonics in your garden and keep to a minimum the chemicals which get washed down the sink. Also don't believe everything (anything?) you read in the papers, go to the source.

Further reading:

Jon Entine, Part 1: Bee Deaths Mystery Solved? http://www.science20.com/jon_entine/part_i_bee_deaths_mystery_solved_neonicotinoids_neonics_may_actually_help_bee_health-149615

Jon Entine, Part 2: Bee Deaths and CCD, http://www.science20.com/jon_entine/part_ii_bee_deaths_and_ccd_flawed_chensheng_lu_harvard_studies_endanger_bees-149799

Goulson, D, An overview of the environmental risks posed by neonicotinoid insecticides. Journal of Applied Ecology, 2013
https://www.sussex.ac.uk/webteam/gateway/file.php?name=goulson-2013-jae.pdf&site=411

Dave Goulson, A buzz in the Meadow, chapter 13

Editors note. The above links are in blue for your convenience but will need to be copied and pasted in your browser.

Divisional Diary 2014/5

Indoor meetings 7.15 for 7.30pm on the 3rd Wednesday, (October to March) at St. Thomas's church hall, Lewes unless otherwise stated. Members are invited to arrive early and assist in putting out chairs. Admittance £1 which will include tea/coffee, cake/biscuits Non-members are welcome.

Programme

Indoor meetings

October 15th – Bee behaviour and colony loss – Norman Carrick
November 19th – Practical beekeeping advice – Tom Moore
December 17th – A quiz evening with Amanda Millar - a change from our schedule
January 21st – AGM – Bumblebees and pollination – Dr Nikki Gammans
February 24th (*NB Tuesday*) – Can we be the generation to save Britain's bees? Paul de Zylva
March 18th – Is Natural always Nice?– Pam Hunter

Other Events

November 15th SBKA Conference, Uckfield
Dec 20th Hastings and Rother talk, see P3 this newsletter.

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.

Officers of the Division

President
Vacant
Chairman
Vacantw
Vice-Chairman/Newsletter Editor
Lionel Reuben, Whincroft, Station Rd, Nth Chailey, BN8 4HG T: 01825 723453; E: lionel.r@talktalk.net
Treasurer/Membership Secretary
Pat Clowser, 5 Wivelsfield Road, Saltdean, BN2 8FP
T: 01273 700404 E:Patricia_clowser@hotmail.com
Secretary
Hilary Osman, Holly Tree Cottage, Norlington Lane, Ringmer, BN8 5SH T: 01273 813045
E:secretary@brightonlewesbeekeepers.co.uk
Meetings Secretary
Vacant
Swarm coordination
Vacant
Webmaster
Gerald Legg, E: gerald@chelifer.com
Librarian
Vicky Dunster (non-committee)
Out-Apiary Managers
Pat Clowser,"Stanmer"
Amanda Millar, "Burgess Hill"
Heather McNiven "Knowlands Farm"
County Representatives
Pat Clowser, Bob Curtis
Education coordinator
Heather McNiven
National Honey Show Representative
Vacant
Committee Members
Bob Curtis, Sue Taylor Gerald Legg

Contributions to our newsletter
Contributions to the newsletter (max 900 words) can be sent preferably by email to the editor see Officer panel above for details
Photos etc. for the website should be emailed to our webmaster, see panel above.

Regional Bee Inspector:
Julian Parker, T: 07775 119469
E:julian.parker@fera.gsi.gov.uk

Seasonal Bee Inspector East of A275: David Rudland
T: 01883 622788 Mob: 07775 119448
E: david.rudland@fera.gsi.gov.uk
Seasonal Bee Inspector other areas: Diane Steele, T: 01903 745667 Mob: 07775 119452 E: diane.steele@fera.gsi.gov.uk