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# THE ESSEX BEEKEEPER



## Monthly Magazine of the Essex Beekeepers' Association

Registered Charity number 1031419  
Furthering the Craft of Beekeeping in Essex

No. 604

[www.essexbeekeepers.com](http://www.essexbeekeepers.com)

April  
2015

## EBKA Divisional Meetings

April & May 2015

2 April	Thursday 8.00pm	Harlow	'Techniques, tricks & inventions' & 'Swarm Control' - Kings Church, Red Willow, Harlow CM19 5PA
8 April	Wednesday 6.00pm	Dengie 100 & Maldon	Members Meeting, Arcadia Road Allotments - Shook Swarm
10 April	Friday 8.00pm	Romford	'The Zest Hive' - varroa free by design. Bill Summers Chadwick Hall, St.Michael's Church, Main Road, Gidea Park, Romford RM2 5EL
16 April	Thursday 7.30pm	Epping Forest	'Skep making' - Martin Buckle. Chingford Horticultural Hall.
20 April	Monday 7.30pm	Chelmsford	'First Aid for beekeepers' - with St. Johns' Ambulance The Link, Trinity Methodist Church, Rainsford Rd, Chelmsford
22 April	Wednesday 7.30pm	Southend	'Maintaining healthy colonies in spite of Varroa' - Clive deBruyn. W1 Hall, Bellingham Lane, Rayleigh
23 April	Thursday 7.30pm	Colchester	Talk on Nosema and Acarine - Langham Community Centre
25 April	Saturday 2.00pm	Saffron Walden	'Apiary Hygiene' - Talk & demo. By Deryck Johnson at his apiary in Wimbish CB10 2UY.
26 April	Sunday	Braintree	Apiary Meeting with Claire Fisher - tel: 01376 503 647
28 April	Tuesday 6.30pm	Saffron Walden	Improve Your beekeeping 1 - First of three demo's for 3+ yr beekeepers. 'Be a Bee Doctor' - Jane Ridler at her apiary at Sewads End CB10 2LF.
1 May	Friday 8.00pm	Romford	Queen rearing - Terry Watson. Chadwick Hall, St.Michael's Church, Main Road, Gidea Park, Romford RM2 5EL
3 May	Sunday 10am - 4pm	Dengie 100 & Maldon	Museum of Power Steam & Garden Show - Langford, Maldon.
7 May	Thursday 8.00pm	Harlow	'Queen Breeding and how to successfully introduce Queens'. Kings Church, Red Willow, Harlow CM19 5PA
9 May	Saturday 2.00pm	Saffron Walden	'All about Swarming' - Richard Pickford at his apiary in Great Easton CM6 2HD.
12 May	Tuesday 6.30pm	Saffron Walden	Improve Your beekeeping 2 - Many Manipulations with Richard Ridler at his apiary in Sewards End CB10 2LF.
17 May	Sunday	Braintree	Essex Young Farmers Show - Boyton Hall CM1 4LN - Marquee in livestock area.
17 May	Sunday	Dengie 100 & Maldon	Essex Young Farmers Show - Boyton Hall CM1 4LN.

## Who's who and how to contact them

President of EBKA *Eric Fenner* Hon Member BBKA, Hon CLM EBKA

### Trustees:

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**Harlow:** Nick Holmes 07730 735 752 **Epping Forest:** Robin Harman 07971 237 312

**Romford:** Pat Allen 01708 220 897 **Saffron Walden:** Jane Ridler 01799 218 023

**Southend:** Chad Colby-Blake 01702 302 209

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All other Divisions:  
Keith Morgan [keith.morgan@fera.gsi.gov.uk](mailto:keith.morgan@fera.gsi.gov.uk) tel. 01485 520 838 or 07919 004 215

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18 May	Monday 7.30pm	Chelmsford	tba
20 May	Wednesday 6.00pm	Dengie 100 & Maldon	Apiary meeting - Arcadia Allotments, Burnham-on-Crouch.
23 May	Saturday 2.30pm	Epping Forest	'Ensuring a maximum honey harvest' - Peter Dalby at Wanstead Apiary.
23 May	Saturday 12.30pm	Saffron Walden	BBQ with guest Torsten Ellman, Chair of Mecklenburg Vorpommern Beekeepers' Association, Germany at Tony & Linda Yeats apiary in Upper Langley Green CB11 4RU.
24 May	Sunday 11.00am	Dengie100 & Maldon	Members visit to <b>RHS Hyde Hall</b> with guided tour. £10 - limited space. Call 07979 862952 / 01245 381 577
28 May	Thursday 7.30pm	Colchester	Members meeting - Langham Community Centre
31 May	Sunday 3.00pm	Braintree	Apiary Meeting with Geoff and Alison Brewer, Felsted CM8 3ET Telephone 01371 822 043

#### Note from Editor

Next month *The Essex Beekeeper* will contain a pull-out index of the articles from the past two years.

## Vacancy for a Minutes Secretary

There is a vacancy on the Central Executive Committee of the EBKA for a Minutes Secretary

If you would like to be considered for this role, please contact

Michael Webb, General Secretary of the EBKA for further details

Please email your request to: [gsecebka@virginmedia.com](mailto:gsecebka@virginmedia.com)

Cover Photograph: Almost ready for harvesting.

Photograph by Jean Smye

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Denzie 100 & Maldon Beekeepers' Association  
host

# Essex Beekeepers' Association 2015 ANNUAL BEEKEEPERS' CONFERENCE

Saturday 31 October 2015  
Ormiston Academy, Burnham-on-Crouch CM0 8BD  
9.45am - 4.30pm

## GUEST SPEAKERS

**Professor Francis Ratnieks, Sussex University**  
Professor of Apiculture (Evolution, Behaviour and Environment)

**Professor Linda Field, Rothamsted Research**  
Head of Biological Chemistry and Crop Protection

**Barbara Dalby, Pebadale Apiaries**  
Apitherapist

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## Essex Beekeepers Association

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on

**Saturday 27th June 2015**

10am to 4pm

*Suitable for Beekeepers of all levels of Experience*

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Apiary Hygiene - Varroa  
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Plus a practical  
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apiary observing how  
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check for disease



### IMPORTANT

- You will need to bring a packed Lunch
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- Tea & Coffee will be Provided

**Pre Booking of Places is Essential as limited no. available**

**Contact; Jim McNeill on 01708 765898**

**jimandliz44@aol.co.uk**

decade.

### **Possible Ban of 40 Pesticides:**

The report claimed the changes would affect:

- **Potatoes:** Many fungicides controlling blight would be banned. *Predicted yield loss - 12%*
- **Wheat:** Fungicides helping to control rust and mildew would be banned. *Predicted yield loss - 12%*
- **Onions:** Mildew and a rotting disease called botrytis are currently held back by chemicals likely to be banned. *Predicted yield loss - 50%*
- **Apples:** Main issue is 'scab'. The chemical likely to be outlawed holds back skin browning and blemishes, and growers are worried consumers will not buy imperfect-looking fruit.

Alongside the impact on crops, the report suggested it could cause a drop in farming profits of £1.7 B, more imports and higher food prices. Nick von Westenholz, CPA chief executive officer, said the report provided "a clear picture of the implications of the flawed system that governs pesticide use in the EU". Several conservation groups were critical of the report. Keith Tyrell, of the Pesticide Action Network, said it was 'scare mongering nonsense' and farmers were 'crying wolf'. He said a bigger threat to apples and other flowering crop yields was the likelihood that pesticides were killing pollinators like bees.

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## **Notes from the Central Executive Committee (CEC)**

Meeting on 29 January 2015

Items reviewed at the above meeting included:

### **New Members of the CEC**

Where the Divisional AGMs had taken place before the CEC meeting, the Chairman welcomed the following new members representing their Divisions:-

Martin Cavalier	Harlow
Mark Chambers	Epping Forest
Margaret Clay	Chelmsford
Tom Geddes	Colchester

### **BBKA Annual Delegates' Meeting (ADM)**

Padraig Floyd, the BBKA delegate reported on the ADM on 15 January 2015 and the result of the propositions put to the meeting. *(Highlights of the ADM appear in an article in the March edition of the BBKA News.)*

### **Electronic communications :**

#### **Centralised Member Record System**

The CEC noted the proposition at the ADM from Avon Beekeepers' Association seeking to adopt a cost effective system to improve greater consistency of data and reduce the burden of record keeping. The CEC agreed to support this proposal whilst continuing with the work on the upgrading of the EBKA record keeping.

### **EBKA Annual General Meeting (AGM)**

The arrangements for the 2015 AGM on Saturday 14 March were finalised.

*Feedback on any matter discussed by CEC is welcomed and should be directed to your Divisional Trustee*

## Report presented by the Examination Secretary to the 2015 AGM on March 14th

### Beginners

Essex continues to attract new beekeepers and many Beginners' courses in the Divisions are now being run by new teams of enthusiasts, allowing more experienced members to help those in their second and third years.

### Basic Assessments 2014

There were 20 applications with 1 deferral for next year. Chelmsford and Saffron Walden topped the list for entries this year and the Miss Avey prizes were awarded to John Dutney (Epping Forest), David Lockie (Chelmsford) and Brian Kiddy (Saffron Walden). Many thanks to Pat Allen, Ted Grad and Deryck Johnson, Jane & Richard Ridler for giving their time and expertise in assessing the candidates. Thanks also to all those contributing at divisional level in preparing members for the assessment, sometimes a slightly daunting task. It is most important that prospective candidates are *not* daunted however – after all, the pass rate is 98% and it is an excellent way for beekeepers who are emerging from novice status to clarify and consolidate their expertise. Preparation for the Basic Assessment is an area which the CEC could contribute to on a county basis in the future.

### Module Examinations

In 2014, for the first time, there has been the opportunity to attend Module Study Groups before both the March and November examinations. The group meets in Dunmow, as central as possible in the County and easily accessible for most. Whilst I have led the study groups, all those attending have contributed to the learning in different

### **For Sale**

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### What to do about it:

There is no chemical treatment for Nosema. What you do depends on the time of year. In the spring and early summer getting the bees onto completely clean comb, using a Bailey comb change (originally developed to help with Nosema) is the best bet. In autumn there really is nothing you can usefully do. Where the problem recurs it is best to requeen and ensure that you do not breed from bees that frequently suffer from Nosema. There are substances on the market which are said to combat Nosema but it is up to the individual to experiment if they wish to - I am not going to suggest anything.

### **EU to Ban More Insecticides**

Tom Heap BBC Radio 4 - Today Programme via eBEEES,  
courtesy of Nottinghamshire BKA

The EU's decision to ban the use of some pesticides could threaten UK crops, increase food prices and hit farmers' profits, a report has claimed.

The report commissioned by three farming bodies said the EU was on course to 'ban' use of 40 chemicals by 2020 to reduce environmental damage. It said this could lead to a surge in pests, affecting production of apples, carrots and peas, among other crops. Conservation groups said reducing pesticides would help the environment. The independent report was carried out by business consultants Andersons and jointly commissioned by the National Farmers' Union (NFU), Crop Protection Association (CPA) and the Agricultural Industries Confederation (AIC).

The European Parliament voted in 2009 to tighten rules on pesticide use and ban at least 22 chemicals deemed harmful to human health. The move banned substances that could cause cancer or harm human reproduction or hormones. At the time, the UK government, the Conservatives and the NFU all opposed the new rules, saying they could hit yields and increase food prices. The report said that as current licences lapsed and tighter rules meant they would not be re-approved, some 40 chemicals would be banned within the next

## Signs and effects of Nosema infection:

We always used to describe the main symptom of Nosema as 'spring dwindle', or a failure of a colony to build up in spring. There could also be dysentery in and around the hive, particularly at the entrance or on the alighting board, showing as brown stains where bees had defaecated. This is probably due to an accumulation of fluid and waste in the rectum and not a direct effect of the disease itself. Where the combs and frames are soiled, the spread is more rapid as house bees try to clear up the mess. Often a spring infection clears up once the older bees die and the bees are able to fly out freely on cleansing flights. Nosema always shortens the life of the individual bee and is particularly damaging to winter bees, which are unable to store the large quantities of protein that they need in their fat bodies and will die too soon to kick start the colony into growth in the spring. The whole colony may collapse. Queens may become infected and are usually superseded, or may stop laying and die.

In addition, there are three bee viruses associated with Nosema. *N. ceranae* is not so simple as it is not seasonal. True, it may damage colonies in the spring, but it does not seem to disappear in the summer. Secondly there is no dysentery, so a colony may die, usually in late winter/ early spring with no obvious signs at all.

## Diagnosing it:

Adult bees with Nosema do not look sick – no pale complexion, fevered brow or going off their food - so the only way to diagnose it is to look for the spores inside the bees. All you need is a sample of 30 of the older bees (from the entrance or from supers) and a microscope with a magnification of 400 times. The bees are crushed, very thoroughly, with some water, either with a pestle and mortar or in a sealed plastic bag using a rolling pin or similar implement. A drop of the resultant liquid is put on a slide, covered with a cover slip and examined under the microscope. The spores appear like little grains of rice. If there are huge numbers then you have a problem, if there are only one or two then you probably can relax. Even if the result is positive, it is impossible for ordinary mortals to tell the 2 species apart. This needs an electron microscope or a DNA test.

ways. Entering for an examination is not a requirement – the emphasis is on finding out more about bees and the knowledge and skills of beekeeping. We have covered Modules 1 and 2 and are currently exploring Module 3 (Disease) in preparation for next Saturday's examinations. We have had 10 successful candidates in 2014, in BBKA Modules 1, 2,3, 6 and 8, with one candidate achieving credit in the Intermediate Theory Certificate (4 modules) and two achieving credit in the Advanced Theory Certificate (all 7 modules). The Basic Certificates and the March 2014 Module certificates were presented at the Annual Conference; the more recent Modules and Microscopy will be presented today.

## More advanced practical examinations

After the very successful CEC Skills Workshop weekend in Microscopy in October 2013, there were 2 successful microscopy candidates this year. The preparation for the General Husbandry Skills Workshop extended over 3 months in the spring of 2014. Two full days were headed by Graham Royle and these were supported with evening meetings for the group at the apiaries of our Basic Assessors. Three delegates have taken the plunge and entered for the BBKA examination this season and hopefully, more of the group will try in 2016. More CEC workshops will be organised in 2015 to promote the advanced learning in the county.

I reported at the March 2014 AGM the need for two distinct CEC positions, namely Examinations Secretary and Education Secretary. There has been an enormous increase in workload for this role since I took over in 2010 when there were only 13 BAs to administer and a few module exams (which at that time happened only once per year; module exams now take place in March and November. Continuing with the education programme for middle and higher ranking beekeepers is a necessity if only to maintain the balance of knowledge and skills in the Association.

My five years as Examinations Secretary has now come to an end, which I have enjoyed thoroughly, and I am extremely pleased that there is a very able nominee as my successor. I hope to continue to contribute to education in the County in 2016.

Jane Ridler

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## TUMMY TROUBLES

Celia Davis - Warwickshire via eBEEES

**Nosema** is very, very common and causes enormous problems in many bee colonies leading to the death of some. It often goes undetected because beekeepers do not realise that there is anything wrong with their bees. Not that Nosema is confined to honey bees: there are many species attacking different creatures, insects and higher animals, and more than one which can infect man, but usually only when the immune system is compromised. They are members of the group Microsporidia and belong to the Fungus Kingdom. So what causes Nosema in honey bees?

There are two organisms to blame: *Nosema apis* and *N. ceranae* and, although their life-cycles and appearance are similar, there are some differences in their effects. The worker honey bee takes the Nosema spores in through its mouth and they germinate in the mid-gut, the bee's stomach, by shooting out a long tube into one of the cells lining the walls of the mid-gut. This tube is rather like a harpoon as it is coiled up inside the spore until released into a cell. Once the tube has penetrated the cell wall the contents of the spore pour in and begin to multiply. Under favourable conditions new spores are produced in 5 days and these may re-infect other cells in the mid-gut, or pass out with the faeces to be taken in by another bee. When the infection is fully developed there may be as many as 30 to 50 million spores in the mid-gut and some recent work has shown that the cells lining the gut may be coated by a film of spores. This description applies to *N. apis*, which has been around for a very long time indeed, but we now have a new kid on the block: *N. ceranae*. This was only discovered and named in 1996, as a parasite on *Apis cerana*, the Eastern honey bee. In 2005 it was found on the Western honey bee in Spain where it seemed to cause far more damage to the colonies than *N.apis*. Since then it has been discovered all over Europe including here and has tended to take over from our old friend *N. apis*, although both species can be present in the same colony. It does not produce so many spores as *N. apis* but is able to penetrate to the inner layer of the gut wall providing bacteria and viruses with an entry point into the bee's haemolymph (blood).