



KBC Newsletter

SURREY BEE DAY

A mini-convention for beekeepers of all levels

(Those of you who attended the Surrey Beekeeper's AGM will have had an advanced notice of the above event, here are the details of what promises to be an interesting day.)

**Saturday 18 February 2006 10.00am to 4.30pm
Ewell Castle School • Church Street • Ewell KT17 2AW**

SBKA is pleased to invite you to attend the Surrey Bee Day

This new initiative is in the format of a mini-convention. A full day is promised, with delegates registering at 10.00am for tea and coffee, three lectures before lunch at 1.00pm and a further two lectures in the afternoon, with a round table involving all our speakers, with tea and coffee before we close at 4.30pm. We hope that there will be some trade exhibits to enjoy during the breaks and a raffle to be drawn during the round table.

The following leading speakers will present a varied programme of lectures on a range of bee keeping subjects

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- **Celia Davis** (author of *The Honey Bee Inside Out*) will talk on **BEES, PLANTS AND THE ENVIRONMENT** following the discovery of the Kashmir Bee Virus in the UK last year.
 - **Brenda Ball** (Rothamsted Research) will talk topically on **BEE VIRUSES**.
 - **Glyn Davies** (BBKA President) has chosen **LOOKING AT EGGS** as his subject, giving an insight into reproduction in bees.
 - **Dr Michael Keith-Lucas** (Reading University) will no doubt fascinate us with his presentation, **POLLEN IN FORENSIC SCIENCE**.
 - **Ivor Davis** (BBKA Chairman and winner of the 2004 Wax Chandlers' Prize) will help us to manage our bees with greater empathy through his talk on **BEE HUSBANDRY**.
 - **Alan Byham** (SE Regional Bee Inspector) will conduct a workshop during the lunch break on IPM, an increasingly important aspect of Keeping our bees healthy.

Tickets £15 to include coffee, Lunch and tea

Please book straight away as numbers are limited

Tickets from Sandra Rickwood, !9 Kenwood Drive, Walton on Thames, Surrey KT12 5AU. Tel: 01932 244 326 or email rickwoodsaka@googlemail.com

(AN APPLICATION FORM IS INCLUDED AT THE BACK OF THIS NEWSLETTER)

• First the good news and then the bad news from USA • Invention covers bees with sugar to get rid of pests

Imagine you're a honeybee.

It's another day at the hive, when suddenly you're hurled into a vat of powdered sugar. Next, a chute opens and you tumble into an abyss. You land on a vibrating screen, looking like Frosty the Snowman.

The good news: You haven't been turned into an exotic confection - and your blood-sucking parasites are gone.

Harry Vanderpool says a couple pounds of powdered sugar and his invention - a machine he calls the Mitey-Victor - could help beekeepers get the upper hand against the deadly Varroa mite.

Scientists trying to stop the Varroa mite, an imported pest from Asia that can wipe out hives, have long known that powdered sugar will cause the mites to release their grip on honeybees.

But Vanderpool's mechanical extractor is something new, and it has the world of apiculture buzzing with speculation.

It's a big deal because the part-time beekeeper's invention could provide an alternative to the chemical warfare that has been waged on Varroa mites for the past 15 years.

Vanderpool's concept showed enough promise that the Oregon Department of Agriculture saw fit to award him nearly \$12,000 from a federal grant to develop a prototype.

"This isn't rocket science whatsoever," Vanderpool said. The machine essentially is a two-level vibrating screener that is powered by a 12-volt battery. Made of stainless steel, the prototype is built on a two-wheeled trailer chassis.

Bees and powdered sugar go in a hopper at the top. Mites and leftover sugar fall into separate drawers at the bottom. The Varroa mites desiccate and die in less than an hour. Most of the bees fly out of the machine, and others are temporarily dazed by the experience and fall onto a conveyor that deposits them on the ground.

Ken Kite, a Stayton resident who keeps beehives as a hobby, let Vanderpool test his machine on his bees. He was impressed, as well as amused: "It just bounced these sugar-coated bees out into a pile." Powdered sugar is routinely used to deliver antibiotics to bees because the insects will eagerly consume it. Kite's bees were unharmed after their journey through the Mitey-Victor, he said, and subsequent tests indicated that few mites remained in the hives. Inventor Vanderpool, who keeps 50 hives on his property south of Salem, says his bees have passed through the Mitey-Victor with no ill effects. There was an embarrassing incident during a test run on a neighbor's hives, when Vanderpool accidentally stepped on some bees that were grooming themselves after the sugar treatment. Similar screening devices are used in industries ranging from commercial bakeries to rock-crushing operations. But the Mitey-Victor has patentable features and Vanderpool has been granted a provisional patent, which gives him a year to get a full-fledged patent.

Varroa mites have spread across the nation (USA) since they were first detected here in 1987. Only Hawaii has escaped their onslaught. They have devastated wild honeybee colonies and become an expensive nuisance for the estimated 200,000 beekeepers in the United States. Industry experts agree that chemicals, which were the first line of defense against the mites, have become less and less effective. "You're breeding super-mites that can tolerate the treatment," Vanderpool said.

Removing mites mechanically makes economic sense too, he said. A small version of the mite extractor for hobbyist use could sell for a few hundred dollars, and a model for large-scale commercial operations could cost about \$8,000 - a bargain compared to the cost of pesticides.

Taking care of bees is an expensive proposition in the best of circumstances.

Michael Rose - Statesman Journal, Oregon, Feb. 2006

Bees in peril

The bee varroa mites are back, grown resistant to chemical pesticides and once again attacking Utah's most enduring state symbol.

"We've had more losses in the fall and early winter than we've ever had, and there's no good solution," said beekeeper Robert Newswander of Logan, whose 5,000 colonies make him one of the state's largest honey producers.

Bees are an irreplaceable part of the food chain. They pollinate all fruit and seed crops, clover for animal forage, cotton used for oil and fiber, as well as flowers. And because most vegetables are actually fruits, bees also pollinate garden produce such as tomatoes, peppers, beans, peas, corn, squash and cucumbers. In other words, no pollination - no fruit.

By Dawn House, The Salt Lake Tribune

Court hears claims of honey scam

The jars of Norfolk honey, with their labels showing a colourful rustic scene and even the name of the producer, may have looked every inch the genuine article.

But they contained an “adulterated” mix of cheaper honey from elsewhere, including Argentina and China, which was unwittingly sold by dozens of small businesses across the county, King’s Lynn Crown Court heard today.

Prosecution counsel Miles Bennett said in a “deliberate and dishonest scam,” husband and wife William and Lynn Baker supplied customers with 17.7 tonnes of the falsely-named product between January 2001 and September 2003.

Sales on ‘honey runs’ around greengrocers, butchers, post offices and other traders in Norfolk during that time had totalled nearly £70,000.

Their actions had only come to light when a beekeeper became suspicious and Norfolk County Council’s trading standards department was alerted.

William Baker, 58, and Lynn Baker, 54, of Bury St Edmunds, have both pleaded not guilty to 12 counts of making a false description of food and 12 of obtaining property by deception.

22 November 2005

● *These Norfolk beekeepers are an observant lot. Thank goodness we read the latest European Directive on the labelling of jars.*

Secrets of bee flight revealed

Combining robotic modelling with slow-motion-videos of airborne honeybees may have helped researchers explain the curious aerodynamics of bee flight.

Aeronautical engineers had previously “proven” that bees cannot fly. So Michael Dickinson, an insect flight expert and colleagues at Caltech in Pasadena, California, US, decided to investigate the forces actually at work during honeybee flight.

In 1996, Charlie Ellington at Cambridge University, UK, showed how vortices rolling along the leading edge of many insects’ wings were a vital source of lift.

Most flying insects beat their wings in large strokes – typically flapping in arcs of 145° to 165°

at a frequency determined by body size – to generate aerodynamic forces sufficient for flight. But this cannot explain how a heavy insect with a short wing beat, such as a bee, generates enough lift to fly.

Exotic forces

Dickinson and his colleagues filmed hovering bees at 6000 frames per second, and plotted the unusual pattern of wing beats. The wing sweeps back in a 90° arc, then flips over as it returns – an incredible 230 times a second. The team made a robot to scale to measure the forces involved. See a video of a bee in a flap, here (5MB, .avi format).

It is the more exotic forces created as the wing changes direction that dominate, says Dickinson. Additional vortices are produced by the rotation of the wing. “It’s like a propeller, where the blade is rotating too,” he says. Also, the wing flaps back into its own wake, which leads to higher forces than flapping in still air. Lastly, there is another peculiar force known as “added-mass force” which peaks at the ends of each stroke and is related to acceleration as the wings’ direction changes.

November 2005, NewScientist, Helen Phillips

Power lines and bees

Overhead power lines may be reviled by most people but for the humble bee they may be a saviour. The millions of acres of land-strips beneath power lines represent an untapped conservation resource for bees and other threatened creatures, new research suggests.

Normally regarded as blots on the landscape and accused by many of producing cancer-inducing low frequency electromagnetic fields, high voltage power lines are not typical candidates for conservation sites, says Kimberly Russell an invertebrate zoologist at the American Museum of Natural History in New York.

In the US, the land covered by power lines makes up more than 5 million acres. That is more land than almost every national park in the US individually, including Yellowstone, says Russell.

For years bees have been in steady decline, with the number of colonies in the US dropping by 57% between 1985 and 1997. “This is especially the case in areas that are heavily developed or dominated by agricultural,” she says.

August 2005, NewScientist, Duncan Graham-Rowe

Bees reared in cities 'healthier'

Bees reared in cities are healthier and more productive than their country cousins, a study by French beekeepers' association Unaf has found.

Urban bees enjoy higher temperatures and a wider variety of plant life for pollination, while avoiding ill-effects of pesticides, the study said.

At the same time they can filter out city pollution such as exhaust fumes.

The study prompted Unaf to start a campaign promoting beekeeping in urban parks, on balconies and on roofs. Beekeepers say urban bees' productivity can be up to four times that of their rural counterparts. "In town, the bees go out more," apiarist Jean Paucton told AFP news agency.

Disorientation

Another beekeeper said urban hives had maintained a steady mortality rate while in the countryside many bees were dying.

"I would find great carpets of sick bees, all trembling," Loic Leray said.

The Union of French Apiarists (Unaf) is campaigning against pesticides, which it says are destroying the industry. It has expressed particular concern about Gaucho and Regent, two banned chemicals, the effects of which are still felt in rural areas. "These molecules are neurotoxins which disorientate the bee and make it impossible for it to find the hive again," Unaf president Henri Clement told AFP.

But others have blamed diversification for the decline, saying attempts by beekeepers to increase production by importing unadapted foreign varieties of bee have backfired.

Correspondents say bees have a special place in French history - they were so admired by the Emperor Napoleon Bonaparte that he made the insect a symbol of his reign.

Microscopy

A number of Reigate Division members are keen to learn about microscopy so I have arranged a course, to be held in March. The demand for places has been very encouraging. Our course is already full and we have a waiting list. It therefore seems an obvious step to see if members of other Surrey Divisions would like to participate in future courses.

John Hamer at Whitehorse Apiary near Guildford will run each course. They will be split across two days and will give beginners a sound basis on which to build their skills. They will also refresh and expand the knowledge of those who have tried a little microscopy in the past. To allow for individual attention, places will be limited to 8 people.

Subject to sufficient demand, the plan is to run two courses:

Autumn 2006 course: - 28 Oct. & 4th Nov. 2006

2007 course: - 3 & 10 March 2007

Day 1. How to set up and use dissecting and compound microscopes; how to detect acarine and nosema; basic dissection.

Day 2. Pollen identification and Morphology (identification of the degree of 'mongrelisation' of our native dark bee by imported strains)

Cost: - £20 per day.

Time: 10am to 4.30pm

Tea, coffee, biscuits and ploughman's lunch provided. (Anyone with special dietary requirements should contact John Hamer before the day of the course)

To gauge demand, I need to hear from Surrey members who would like to attend. I would be grateful if you could let your members know that these courses are being planned and ask them to contact me, (preferably by email but, for the technophobes, telephone is fine!) to book a place.

It would be preferable for members to bring their own microscopes or borrow the equipment used by their division because it is best to practice on the equipment that will be used on a regular basis. Each course member will need two microscopes – dissecting and compound. However, John Hamer is confident that he will be able to provide microscopes for those who have no other access.

Bob Maurer 07740 707500 or bob.maurer@ntlworld.com

Grocer Magazine - 27 October

'In value terms honey sales overtook marmalade sales by 12% in 2004'

WEB BROWSING

Out of interest and also idle curiosity I have been browsing the web and come across the following sites.

<http://www.kohala.net/bees/diseasechart.html>

This site displays a chart of what they call "Bee Diseases and Afflictions", it's a page from the Kohala Guide, Kohala is one of the main Hawain islands.

www.beehoo.com

A site that calls it's self the 'Worlds Beekeeping Directory' or in French 'Annuaire Mondial de L'Apiculture'. It's in French and English so you Francophiles can practice your skills.

The next sites I came across got me thinking about the cost of Bee Keeping in the UK, they are equipment suppliers , one in America and one in Denmark.

www.betterbee.com

A site for American bee keepers. Note the cost

of a Commercial body - \$16.55 and a Commercial super - \$12.30. That's £9.26 and £6.89 respectively. A starter kit of a hive in Eastern Pinewood and numerous bits of kit, unassembled \$215, that's £120.40. They also supply Polystyrene hives but they seem to be slightly more expensive.

Has anyone had any experience of Polystyrene hives, or hives made of any material other than wood?

www.swienty.com

A supplier based in Denmark, unfortunately the site is down until 28 january but last time I looked they too were advertising their equipment at cheeper prices than we appear to pay. They also supply Polystyrene hives.

www.bees4kids.org.uk

A site that promotes bee keeping education for schools, a useful site if you ever get asked to talk about bee keeping, I've just been asked to talk to a local Guide Group. I wouldn't say I'm nervous - petrified more like!

If you've come across any interesting sites please email me on hive26a@yahoo.co.uk

▼ [Application Form - see page 1](#)

SBKA BEE DAY - SATURDAY 18 FEBRUARY 2006

Application for tickets

Name
Address
.....
.....
Postcode Telephone
Association Division

I/WE require tickets at £15 each - **TOTAL £**

Please make cheques payable to **Surrey Bee Keepers Association**

Names of Delegates:
.....
.....
.....

Please write 'V' in box above if Vegetairian

Please detach and post to:

Sandra Rickwood
19 Kenwood Drive
Walton on Thames
Surrey KT12 5AU

Please don't forget to enclose your cheque!

Whilst at Wisley I picked up . . .

The Complete and Easy Guide to Beekeeping

by Kim Flottum -

Published 2005 by Quarry Books

ISBN - 1-84543-021-2

Highly recommend for beginners and those wanting to use honey and make beeswax products.

An easy read and superb photographs. Price - £12.99.

Joyce Acher

Blue honey!

In a 50 mile radius around Fayetteville in North Carolina, some beekeepers get blue honey. No one is quite sure what gives the colour, but it could be the huckleberries (a low bush blueberry) that once eaten leaves a blue-stained tongue for days.

And finally -

The Kingston Apiary 2006 season starts on 18 March

**SBKA Epsom
Division Shop**

**The shop opens
on Saturday 1 April 2006.**

**The shop will be open every Saturday
between 3pm and 5pm.**

The shop is situated at:- The Apiary, Upper Mill, Kingston Road, Ewell KT17 2AF, at the end of the drive opposite Mill Lane behind the Upper Mill building.

Stock the same as last year with a few additions including National, Commercial and WBC hives, all sizes of wax and frames, jars and containers, medicaments and most common beekeeping sundries.

2005 prices - no increase.

Second quality prices on most National hive parts while stocks last.

Phone me on 01737 813066 (home) or 07747 867455 (mobile) to check if I have in stock and avoid a wasted journey.

Steve Secker, Shop Manager