

FEBRUARY 2013

Surrey Beekeepers Association

CROYDON DIVISION

Chairman Mark Stott 0208 684 1098
Treasurer Tamar Cavett 0208 406 9258
Secretary Joyce Atkinson 0208 657 2817

www.croydonbeekeepers.co.uk



DATES TO NOTE

FRIDAY 22 nd. FEBRUARY 7-30p.m. AN EVENING TALK
Warlingham Methodist Church Hall, CR6 9HA
Planting for Pollination by Caron Alton
Followed by tea and cakes - a small charge
to cover costs.

SATURDAY 23 rd. FEBRUARY SURREY BEE DAY
This all day event is already well booked up - some
details were in last months edition. Cost £20-00 inc. lunch
Contact Sandra Rickwood if wish to know about the
lectures that are planned and wish to book a place:
tele: 01932 244326 or
rickwoodsba@googlemail.com or
19, Kenwood Drive, Walton on Thames, KT12 5AU

FRIDAY 15 th. MARCH 7-30 p.m. AN EVENING TALK
Warlingham Methodist Church Hall, CR6 9HA
Plants and Pollination by Sue Davis
Followed by tea and cake - a small charge to
cover costs.

MICROSCOPY DAYS
If you wish to know about these contact Mark Stott
Tele: 0208 684 1098
These will include the use of a microscope to study
pollen and must be of interest to members who
attended the first of our winter talks.

TRUSTEE

Unfortunately Derek Read who was appointed to this post at our last
annual general meeting has had to retire as our division's trustee and it
is essential that we find a replacement. This is a responsible job
and involves attending meetings of both our Croydon committee and
of the Surrey BKA council some 10 per year but the odd one or two
may missed.

If you feel able to take on this position PLEASE let us know
Rosemary Collett, our previous trustee can explain what is involved 01737 822394

THORNE BEEHIVES – THE COMPLETE EQUIPMENT SUPPLY COMPANY

Richard Palmer is our local agent and has a supply of this years catalogue.

David Shepherd prepared the following summary of the first of our winter evening talks for those who were unable to attend. The next two continue the theme so do come. Ours thanks to Joyce Atkinson for arranging these and organising the refreshments.

Winter Talk
'Fun With Pollen Traps' Bob Smith NDB Kent Beekeepers

Those of us that braved the ice and cold were treated to a fascinating evening learning about Bees, Flowers & Pollen on Friday evening.

Bees co-evolved with flowering plants over the last 120 odd million years and Bob outlined floral structure, plant sexual reproduction and some of the amazing pollination mechanisms that flowers have developed to ensure the completion of their life cycles. Pollen is the honey bees' source of protein: the average honey bee colony (weighing 5-7kg) needs to collect between 30-40 kg per season; quite an astonishing amount considering the average pollen load of a worker is only 10 mg – a heck of a lot of worker foraging flights if anyone cares to work it out.

Although wind pollinated plants are not normally associated with bees, they can be a source of protein, particularly when other pollen is in short supply.

Pollen is picked up by branched hairs and static on the bees' bodies; they can use their mandibles to bite into the anthers to release the pollen grains; bumble bees are well known to also use 'buzz vibration' to release the pollen. We were shown the impressive array of adaptations the workers possess to trap the grains and pass them back to the rear legs to be compressed into the familiar pollen load including: the notch in the front legs to clean the antennae; the middle leg combs (which clean the thorax – but not quite); the rear legs which compress and pack the pollen around the central hair in the pollen basket moistening with a little nectar. Hairs and combs are all over the place, but all are carefully 'designed' to point in co-ordinated directions. Combing and packing occurs in mid-flight, one rear leg combing and packing the opposite one.

Back in the hive, the pollen is mixed with lactic acid to prevent germination and improve 'shelf life' before packing in the cells. The point was made that unused pollen can cause problems by using up valuable brood space, a potential swarm trigger.

Bob showed us some pollen traps that he had designed and made, based on the metal pollen grids that can be purchased; also air pollen traps. The University of Worcester provides daily National pollen forecasts: [<http://www.worcester.ac.uk/discover/pollen-forecast.html>]

As we know pollen comes in a variety of colours but colour is not a good guide as to origin, and only microscopy has any degree of accuracy; the pollen load is broken and made into a slurry, stained and mounted on a slide. The standard textbook is 'Pollen Identification for Beekeepers' by Rex Sawyer which is now available as a CD.

Bob lives on the edge of the Kent marshes and outlined some of his personal research on plants visited by his bees in mid-summer which involved such things as setting his pollen trap for 15 mins every hour from 8.30 am. to 9.30 pm (must have drunk much tea). Assisted by Google Earth, he identified the field crops in his area (all in flower), but perhaps not surprisingly found they were largely ignored in favour of wild flowers and what we would call 'weeds'. He found that foraging of some plants had ceased by 'lunchtime' and on another occasion that two 'identical' hives 5 metres apart both went for balanced diets but only co-incided on two species of flower out of a total of 7 identified.

A final thought: most foraging occurs up to 1 mile radius (~ 640 acres) but will travel 3 miles (~ 18,000 acres) – I'd certainly get lost if I was a honey bee, which I'm pleased I'm not

Ain't bees marvellous!