



South Chilterns Beekeepers Association

President: Ian Wootton

The September Apiary meeting is on Saturday 18th starting at 2.30pm. The venue is by courtesy of Anne Arlidge. See Secretary's note.

Newsletter No.21

September 2004

Forthcoming events:

FBBKA Honey Show
September 30th

National Honey Show
October 21st – 23rd
RAF Museum, Hendon

Apimondia Dublin 2005
21st – 26th August

www.apimondia2005.com

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In the Apiary, September

Your supers will have been removed by now – any dribs and drabs of nectar coming in the next few weeks will be usefully stored away in the brood boxes. If you haven't yet administered your varroa treatment you must do it immediately.

If you have too many colonies now is the time to unite – remove the unwanted queen and unite by the newspaper method, putting the queen-right colony on top. Evenings are the best for this operation and don't forget, if you have three very small lots, unite the three lots by the same method, keeping your preferred queen. It is acceptable to unite colonies without removing one queen (the bees will sort things out) but you cannot guarantee that the best, or youngest, queen will survive.

WASPS: This is the worst year I can remember for wasps – no real danger to a strong colony but sustained attempts by wasps to gain entry makes the bees bad tempered so help them repel the attackers by reducing the entrances. A couple of inches should be about right but be prepared to reduce even further if the wasps are getting in. Small colonies not built up beyond the nucleus stage can easily be cleared out by wasps, hence my earlier advice about uniting. Don't jump to a hasty conclusion that a colony is queenless just because there is no brood – some strains of queens cease laying the moment the flow stops. If there is evidence that drones are being kicked out and pollen is being taken in then the colony is OK.

I like to start my feeding by mid September- 2lbs sugar to 1 pint of water or 1kg to just half a litre. The quantities need only be approximate. Feed late evenings otherwise robbing could be started. If you aim to finish feeding by mid October, that should be fine.

George Butler

IN MEMORIAM – GEORGE HAWTHORNE

After working in Yorkshire and later in this part of the world as a commercial bee farmer, George Hawthorne applied for and was appointed in 1953 as the lecturer in the Berkshire Agricultural College. He remained there until he retired.

In retrospect, his appointment was inspired because he turned out to have a natural talent for education in the broadest sense: lecturing and giving practical demonstrations, winter and summer; helping local associations; inspecting for foul brood; hosting spring conventions and autumn honey shows at Burchetts Green; judging honey shows; writing books and articles and editing the local beekeeping newsletter for more than 30 years.

Others have written about his place in national beekeeping, as the senior honey show judge and examiner for the BBKA but my own memories are more personal. When we retired to this part of the country about 25 years ago, as hobby beekeepers we naturally had relocation problems, ranging from where to find local suppliers of equipment to how to re-queen the most aggressive colony we had ever encountered!



A tentative approach to George produced an instant response – within a short time he was on site and took charge of a successful manipulation, and this was only the first of many occasions when I had occasion to be grateful for assistance given most generously and enhanced by his gentle manner and fund of apiary anecdotes. He would even, as I found to my profit, invite one into his College workshop (chaotically busy and untidy) and give individual tuition on disease diagnosis and microscopy. How he ever found time for a family life is a mystery.

Even in retirement, George continued to demonstrate his craft and when the South Chilterns BKA needed a first president, there was only one possible choice. George now had more time to pursue some of his other interests, such as steam power and he organized rallies at Woodcote which have become an established event as well as using his steamroller to improve the village roads.

In his latter years his health deteriorated and he was forced to become less active. The number of people who attended his funeral service at his village church is some indication of the regard in which he was held. I knew George as a friend for about 25 years. I wish it had been longer.

Ian Wootton (President)

FROM THE SECRETARY

SEPTEMBER MEETING: The last summer meeting of the year will be held at Anne Arlidge's hillside apiary near Lower Assendon.

The number of parking spaces near the apiary have been increased since last year.

Approaching the apiary from Henley on the A4130, branch right in Lower Assendon onto the B480 to Stonor. Take the first right turn, followed almost immediately by another right turn onto an unmade track which goes uphill to the wooded apiary. OS Ref 747 848.

July Meeting

Our meeting took place at the home of John Westcar. Bob Booth also keeps his bees in John's garden and the intention was to do a double inspection with Ron Crocker examining John's bees and to do a comb exchange and Reg. Hook to do an inspection of Bob's bees.

Ron demonstrated how to do a brood-box comb exchange as had been recommended by Ian Homer when he had looked at John's bees a week earlier. Due to the presence of wild comb this took a little longer than had been anticipated and consequently we ran out of time and Bob's bees were not inspected.

Our thanks go to John and Sheila for being hosts for this meeting.

George Butler

Apiary Tour

The July apiary tour was hampered by inclement weather. This was disappointing as the time available was very much reduced. So, although not so much was done as anticipated, the beginners and prospective beekeepers that attended learned quite a bit so the time was not wasted.

Ron Crocker

From the Chairman – George Hawthorne

It was with sadness that we learned of the death of George who passed away peacefully in the early hours of Sunday 1st August after a long illness.

George had been a member of South Chilterns since its inception in 1978 and had been President for a number of years until two years ago. George was a Yorkshire man and proud of it having been born in the North Riding of Yorkshire, coming from a long line of farmers. Bee-keeping was in the family and George started with bees at an early age. He first worked for a commercial beekeeper for a year or so before becoming C.B.I. at the Berkshire College of Agriculture a post he held until his retirement. He was man of many interests including steam engines, wood turning and an authority on horse brasses and skep making.

George was a deeply religious man and a man of principles. It can truly be said of George that you got what you saw and many will sadly miss him.

Our sympathy goes to Audrey, his wife, and family.

George Butler

My memories of George Hawthorne by Eric Morris

I first met George and his family when we moved to Woodcote in November 1961 and I started to attend what was then the village Methodist chapel.

In 1963 George asked if I would be interested in joining a committee with the intention of organising a steam rally. So was born the Woodcote Veteran Transport Rally, which this year held its 41st successful meeting.

In 1964 I retired from the Army and the following year my wife suggested that I should take up beekeeping, something I had been involved in as a boy. I bought a WBC hive complete with bees, from a retired doctor in Tilehurst who assured me that they were healthy and quiet. The following day George inspected them for me, helped me douse them with petrol, watched me dig a deep hole and burn them. It was my first lesson in looking for disease and I quickly joined the Reading Beekeepers Association and took all the advice I could.

There followed many years of being involved with displays at Reading Show and on George's home turf at the College at Burchetts Green. By 1976 the Reading Association was over 140 strong and creating many problems for the Secretary and Treasurer. Two years with an observation hive at Henley Show revealed a lot of interest in South Oxfordshire from people not wanting to travel to Reading. George Knights and I called a public meeting at Sonning Common and with a lot of advice from George Hawthorne the South Chiltern Beekeepers Association was formed. The latter George became a stalwart member and long-time President. In the meantime I did a course on woodturning and spent many happy hours at the lathe. One day George said that he was interested and, after a practice session in my shed, went on to become an enthusiast, producing many fine items.

There in a few words are my memories of a very good friend; from the Chapel to steam rallies; beekeeping and woodturning.

George Hawthorne:

I met George in his first week as County Beekeeping Advisor in 1953 having been advised to try the "new boy" with a problem with bees that I had been given. George did not know the answer (good start) but he knew someone that did. He sent a sample to Rothamsted, they did not know either, they had never seen this before. It was only when Dr Bailey came on the scene was it recognized as sac brood – said to be a first for George.

When ADAS wanted a Bees Officer for Berkshire George put my name forward then when the post was offered, he persuaded me to take it up saying that it would be to our mutual advantage – in many ways it certainly was. It was George together with Harry Wickens of Manleys that introduced me to the Bee Farmers Association

Although ill for some time he was still willing to give advice and was available almost to the end, he will be missed, certainly by Berkshire and Oxfordshire beekeepers.

Ron Crocker

FROM THE EDITOR

Lately there have been a spate of reports of "failed" queens: how many are genuine failures is open to conjecture. The presence of laying workers or all drone brood indicate a failed or missing queen but often queens stop laying for a time, particularly the dark strains so the motto is make sure before trying to introduce another. It is frustrating to make a mistake and lose a perfectly good queen, especially if she is purchased.

In recent winters I have lost colonies through excess stores in the brood chamber, we have had mild conditions up to late November resulting in a late crop from the ivy. It would make sense to add supers in the autumn and removing them before the onset of bad weather. Possibly they could be left until the spring. For the last few years I have left one super to supplement the stores but have been caught out (as many others have) with insufficient space in the brood chamber. Colonies that have wintered on double brood chambers have not fared so badly.

Ron Crocker

Thymol Versus Pyrethroids

Why is varroa less likely to develop resistance to thymol products than pyrethroids?

All beekeepers should be aware that in certain areas of England and Wales, there are varroa mites resistant to the effects of pyrethroids, the active ingredients in Apistan® and Bayvarol®.

Although we are advising beekeepers to monitor mites carefully and continue to use pyrethroids in unaffected areas, it is also useful for beekeepers to learn other methods for coping with the mite. One alternative to the pyrethroids in the UK is to use Apiguard®, which has recently been approved for varroa control.

The active ingredient of this product is an essential oil called thymol. However, there are concerns that if this product is used, varroa could develop resistance in the same way that it has become resistant to pyrethroids. However, this is much less likely to happen, and this is why.

Pyrethroids affect varroa mites by acting on a specific part of the mite, namely, a sodium channel, resulting in terminal effects on the nervous system. As there is just this one target site, it is quite likely that the mite will eventually develop resistance through a process of selection. It only takes one natural mutation for the mite to become immune to the effects of pyrethroids. It could do this by slightly changing the shape of the target site, so that the pyrethroid molecule cannot 'stick' to its target anymore, becoming redundant. If the compound is present, eg you are using a pyrethroid to treat your colonies, these resistant mites will be able to cope with it and survive while all the susceptible ones will die. The surviving (resistant) mites will reproduce and, after several breeding cycles, all the mites present in the colony will be resistant to pyrethroids. This is not just specific to mites, most people are aware of the medical problems caused by antibiotic resistant bacteria, and it is really the same principle.

However, thymol is different. Although the actual biochemical mechanisms of its action are not fully understood, what is known is that it acts on different parts of the nervous system, ie it has several target sites. In addition, the generalist nature of thymol action means it is less likely for pests to become resistant to it. Thymol de-natures proteins, breaks down cells and interferes with other cellular processes so its action is not confined to the nervous system. This range of activities is most advantageous for pest management purposes. If a varroa mite becomes resistant to one of these effects, it is still likely to be susceptible to the others, thus, the compound will still affect the mite. It is highly unlikely that there will be a mite that is resistant to all of the different effects of thymol (although in theory, it is possible) as it would take several different mutations.

It is interesting to note that often pathogens that become resistant to a controlling compound often suffer in other ways, becoming less fertile or living for a shorter period of time, which may also work in thymol's favour. Of course, promotion of resistance is much less likely if the compound is used the way it is intended, so please follow the instructions!

A similar reasoning is behind integrated pest management approaches to varroa control. These do not rely on just one product to control the mite populations, but a variety of methods, including chemical and bio-technical controls. If mites were to become resistant to one method, it would be controlled by another. For more information about IPM for varroa control, please see the articles by Richard Ball, published in several recent editions of the BBKA News. Further information about Apiguard® can be found on the Vita (Europe) Ltd website:

<http://www.vita-europe.com>

Dr Ruth Waite

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Conflict in the Beehive

Conflict Resolution by Worker Policing

Professor Ratnieks, Founder and Head of the Laboratory of Apiculture and Social Insects (LASI) at Sheffield University, recently gave an interesting lecture entitled 'Conflict in the Beehive'. This subject which he has been studying in several different countries for the past fifteen years, is concerned directly or indirectly with reproduction and especially the production of males (drones) and genetic relatedness.

A worker honey bee can lay viable eggs that will turn into males. If such eggs were reared, the worker bee would benefit because a worker is more related to her own sons (0.5) than to her brothers, the sons of the queen (0.25), or to her sister workers' sons (0.15). The outcome of this situation though is exactly what we find in practice; that workers are better off in terms of their relatedness to the males that are reared in their colony from queen laid eggs, and so they prevent each other from reproducing.

Almost all workers (99.98%) in a queen-right colony have non-active ovaries, but the occasional worker has activated ovaries containing full-sized eggs. If one worker lays an egg, that egg will almost certainly be eaten by another worker within a few hours. Workers distinguish queen-laid eggs by their pheromone marking. This mutual prevention of reproduction by workers has been named 'worker policing' by Professor Ratnieks, which he discovered with a colleague in 1989 when, for the first time, they observed a policing worker inspecting and then killing by eating, another worker-laid egg.

In the honey bee colony therefore, the conflict over male reproduction is resolved. The winners are the workers collectively and the queen, the losers being the workers as individuals. The extreme reproductive division of labour seen in the bee colony, in which the queen is effectively the sole reproducing individual, comes about in part because of 'worker policing'.

In somewhat similar fashion in human society, we have evolved mechanisms to prevent individuals from causing harm to society as a whole.

Further information on LASI may be obtained from: F.Ratnieks@Sheffield.ac.uk

<http://www.shef.ac.uk/uni/projects/taplab/flwrpub.html>

Pat Rich, Somerset BKA

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Newsletter deadline: 10th of the month for inclusion in the next Newsletter.

Advertisements: Small advertisements free to members. Traders £1 per issue (up to five lines) additional lines 20p per line. Cheques to be made payable to South Chilterns BKA. and forwarded to the Editor.

Wanted: Second hand solar wax extractor. Paul Moorcroft. 0118 9863743 (Not the number on the membership list.)

Wanted: For a group of beekeepers - small, motorized stainless steel honey extractor to take all sizes of frames. Details to the Editor.

Wanted: Observation hive in reasonable condition. Paul Moorcroft. 0118 9863743

Don't Go Miles to get your bee supplies or pay expensive carriage. **Go to John Belcher** who has most of your needs in stock and everything else at the end of the telephone. Please call any time on 0118 984 2321

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