

# Bee Talk

Newsletter of The Blackburn and East Lancashire Branch of The Lancashire & North West Beekeepers Association September 2009 www.blackburnbeekeepers.com Registered Charity

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# **MEMBERS SERVICES**

Bayvoral - Apiguard - Oxalic Acid - Thymol - Fumidi'B'

These Chemicals for treating bees can be obtained from: Bill Ainsworth. Phone 01282 614015

(Bill will have them available at beekeeper's meetings)

# LIBRARY

There is an extensive range of books on all aspects of beekeeping that can be borrowed from the Association library.

Please contact

1 icase contact

David Rayner on 01200 426898

# **MEMBERSHIP**

REGISTERED MEMBER. Subscription will be £18.00

<u>PARTNER MEMBER.</u> This is for partners of registered members living in the same household wishing to keep bees and includes full insurance cover. However they will not receive their own copy of BBKA News. Subscription will be £11.00

<u>COUNTRY MEMBER</u>. This is for people who do not keep bees, but wish to receive BBKA News and attend branch meetings etc. This class of member does not include any insurance cover. Subscription will be £10.00

ASSOCIATE MEMBER. A member of our branch only, without any benefits from the BBKA or County. Subscription will be £9.00

### IMPORTANT INSURANCE NOTICE

Under the new constitution, prompt payment is essential. Basically, payment will be required by the 31 December each year as insurance is now based on the currant years membership. New and lapsed members insurance cover will not start until six weeks after paying their subscription.

For insurance purposes subs will need to be promptly, otherwise you will not have third party insurance

SUBS SHOULD BE PAID TO PHILIP AINSWORTH HON. TREAS.9 Duchess Street Darwen Blackburn BB3 0QQ
Phone 07713161480

# Association Swarm Catchers.

A small charge is made to collect swarms to cover expenses which is up to the discrection of the individual collector

# BLACKBURN, DARWEN, ACCRINGTON, MELLOR, PRESTON, ROSSENDALE AREAS

Bob Fulton

Telephone 01254-772780

E Mail:::: home.brew@talktalk.net

### **CLITHEROE AND SURROUNDING AREAS**

John Zamorski

Telephone 01200-427661

E Mail:::: john@johnzamorski.wanadoo.co.uk

# BURNLEY, NELSON AND SURROUNDING AREAS

Bill Ainsworth

Telephone 01282-614015

E Mail:::: billscotroad@o2.co.uk

Please feel free to ring any of the above in your area and they will do their best to sort out the problem.

Please bear in mind that the swarm collectors will only deal with honey bee swarms and will not deal with bumble-bee or wasp problems.

# Minutes of Committee Meeting 28th June

Members present:- P.Ainsworth, R.Bradshaw, D.Bush, R.Dempster, A.Hawkins, B.Jackson, D.Rayner, P.Roberts, J.Wilson, J.Zamorski.

- 1. Apologies for absence:- W.Ainsworth, C.Coughlin
- 2. J. Zamorski informed the committee that Lancaster Branch were intending to leave Lancashire and North West Beekeepers Association and would present the details At the next County meeting in September.
- 3. J. Zamorski was to approach Mr J. Wrigley to request he take the post of Branch Auditor. (It was confirmed after the meeting that he would do this)
  - 4. Mr.P. Ainsworth showed the committee a catalogue with a choice of cups and Plaques to choose for the memory of Ken Gaiger. These would be made ready For the Branch Honey Show in October.
- 5. Salmesbury village hall was booked for the Honey Show on 4<sup>th</sup> October. Caroline Was to confirm with A. Gillett with regard to judging.
- 6. The programme for 2010 was discussed and suggestion made as to the subjects to Be used. J.Zamorski,D. Rayner and P. Roberts were to investigate some good Speakers and the booking of a venue to invite other branches to come to help cover Costs was discussed. The Pie and Peas at the AGM was felt to be a great way of Encouraging members to attend and should continue.
  - 7. P. Ainsworth was to investigate obtaining some form of new members pack. It Was felt that because Beetalk was now on the internet only then new members Did not have any hard copy information.
    - 8. The date of the next Committee meeting is 20th September 2009

		FUTURE BRANCH MEETING	GS				
DATE	TIME	VENUE	ORGA	NISER/CONTACT			
20th Sept.	2pm Bring yo	Angela Moyles, Twiston BB7 4BZ John Zamorski/ Angela Moyles Association Barbecue.  your own booze and a bottle for the Raffle					
4th Oct.	2pm	Salmesbury Village Hall, Mellor. PR  Association Honey Show  12-30- to 1-45 setting up times		Caroline Coughlin			
15th Nov.	2pm	Colne Masonic Hall, Colne BB8 0B	S	Commitee			
Annual General Meeting With Free Pie and Peas Supper							

# Annual General Meeting With Free Pie and Peas Supper

Reminder to all committee members. Meetings marked \* are also committee meetings which will start one hour before the main meeting.

We will where possible open hives so bring along your protective clothing just in case.

# WHAT'S IN THE HONEY POT?



# A few snippets of news and information that might be of interest

# Editorial September 2009

Well here we go, another season nearly over. Listening to our members it seems that most of us have had a good season and some of us not.

The weather well what can we say, its been lovely for most of the year, a far cry from last year, but then we had July and we are back to normal. Bees built up so well that when the horrible July was over we had large colonies with no food and many beekeepers were forced to feed the bees, otherwise they would have starved. I suppose that is what makes beekeeping in the UK so unlike anywhere else in the world, but it can be sometimes hard work. Over here in Thailand you can more or less plan things as the weather is stable but in the UK its a challenge to say the least but far more interesting and I think in terms of honey quality far better, you get a little bit of most things in the honey, that is unless you are near the heather, balsam or borage etc

Meeting have been well attended throughout the season, with many new beekeepers attending the interesting subjects with great speakers. So on behalf of everyone I would like to thank the speakers, the members for letting us use there homes and last but not least the program secretary, Pauline for all her hard work in setting all this up.

The website is doing OK and up to the time of writing as attracted pushing on 13,000 hits in just less than 2 years, which, although not like Facebook is still OK with around 550 hits a month. On a more depressing note is the lack of contributions we get from our members, and this goes for Beetalk and also for the Pendle Black Bee Blog that Bill Ainsworth has up and running. If you look at other web sites and other Bee-talks in the UK, their magazines are full of contributions from members. So come on you lazy lot, get some stuff sent in to both Bill and myself.

We seem to have had a few problems with new members not getting membership cards and information from the BBKA. Phil Ainsworth as been looking into the matter and he as put a report out on the web site. He and the committee have also been working on an information pack for new members, which should be more of less ready. I will let you know on the progress of both these issues via the web site.

So I hope you all enjoy this second edition of Beetalk and that you have had a decent year with the bees and that all you new members have enjoyed your first year in this great hobby of keeping bees.

You all take care and best wishes to you all

Michael Birt Webmaster and Beetalk Editor

# September to December

Things that you should be doing with your bees

<u>September</u>

All your honey should now be off the hives and the wet supers put on top of the brood chamber so as to let the bees clean them out. Feed your bees now if they are not bringing in to much nector so as to get the queen laying the winter bees that will get the stocks through the winter. This is a very important time as it will reward you next season. Now is the latest time to treat your bees with Apistan or Bavoral unless you are going to leave it until later and then treat with Oxalic Acid. This will depend on how your hives are infested. Store your equipment away in a place that is not exposed to where any dampness can get inside and cause mold to form and also protect them from wax moth. Now also is the time to be getting something ready for the honey show, and please have a go, its great fun and if you win its an added bonus.

October.

Maybe your bees will still be taking feed. If so carry on as the more food they have the better chance of going through the winter and coming out strong in spring. Any treatment with Apistan or Bavoral should now be well completed.

November.

More or less all the seasons work with the hives should now be complete apart from if you are going to treat your bees with Oxalic acid, Maybe you can paint and spruce up the outside, being careful with what you use. Now is the time to start to look at your equipment, Any dirty hives will need to be cleaned and blow torched so as to kill any disease. New frames may need replacing and re-waxing as its better to have foundation replaced on a regular basis as it will keep down disease. Its like the old saying of cleanliness is next to godliness. The golden rule over the winter is to get yourself ready for the oncoming season as before you know it will be here and many a beekeepers have been well and truly caught with his or her trousers down with not preparing oneself during the winter months.

This list is of things is only a rough guide as things can and do change overnight. For example, the weather my change so restricting the honey flow. Your queen my slow up laying which could prompt another swarm when you least expect it. Then you have all kinds of diseases that need to be looked for. Nasty bees need to be sorted out, always try to get quiet bees and the best way to do that is to obtain British Black Bees and if anyone tells you any difference take no notice of them. The golden rule is keep a look out all the time. Inspect your hives on a regular basis and if you are unsure of anything ask another member or if you are a beginner ask your mentor. That's what we are all here for to try to get use all on the right footing and working the same way as best we can. Always remember we are up in the north of the country and things you read in books sometimes do not apply to where we are in Lancashire and sometimes we can be a good month behind the south of the country so bear this in mind.

# **Branch News**

# Branch meeting 28th June 2009 at the home of Mr. and Mrs. B Jackson

What a wonderful turnout we had at Brian and Margaret's house on Sunday. My wife, Lynne, counted 48 people when everybody assembled but I think a few more arrived a little later. Marvellous turnout. Our speaker was Ian Molyneux, Bees Inspector for the North West. He gave us an excellent talk on the use of Oxalic acid and how important it is to keep on top of the Varroa mites in the colony. He then went on to give a practical demonstration to us which was very informative and included some different ways of swarm control. This went well until near the end of the demo when Brian's bees, which had been very well behaved up till then, decided they had had enough and proceeded to sting a few people. I had left a few minutes before to let the girls know we were coming in for a brew so I escaped the onslaught. The weather was very kind to us and there were lots of discussion groups afterwards during the brew break. As people drifted away I could see lots of people clutching cuttings and plants etc donated by Brian and Margaret and lots of smiling faces. One thing I think we must all start to do now is fetch some chairs with us. Meetings are now so well attended it is hard work for the hosts to bring out lots of seating and then they have to take it all back in after everyone has gone so if you stick a chair or two in your boot that would be a great help. Thanks very much to Brian and Margaret for their hospitality and for Margaret's wonderful home made cakes. The next meeting will be at Colne Masonic Hall on Sunday 26th July at 2pm. The speaker is Mr. Martin Smith who is chairman of the BBKA. He is also the Secretary of Lancashire and North West beekeepers so let's make sure we give him a good turnout from Blackburn Branch. No need to bring your veils to this meeting but always make sure you bring them to any meeting where we may be opening bees. See you on 26th.

# Branch Monthly Meeting Sunday 26th July

Great attendance at Colne Masonic Hall to listen to a talk from Mr. Martin Smith, Chairman of the BBKA. He is also the Secretary of Lancashire County. We watched a power point presentation entitled "The BBKA, Helping Bees and Beekeeping." There were lots of questions and we were given details as to how our capitation is spent. The general consensus was positive. Afterwards during the tea break Bill Ainsworth held a silent auction of some surplus equipment. There were a few new members present but I did not get the chance to talk to them all. There seems to be a problem getting through to Phil when trying to join so please bear with us while we try to sort it out. Hopefully there will be a new members pack ready soon and we can get those distributed to those people. John.

# Monthly Meeting Sunday 23rd August

Once again we had a great turnout to Bill Ainsworth's Allotment Clubhouse. We ran out of chairs so apologies to those of you who had to stand like me. Poor Helen was on the floor and when she spoke I could not see her. The speaker was Doug Jones, Seasonal Bees Inspector for the North West and he gave us a very interesting and entertaining talk. He demonstrated the use of some of his home made equipment and also explained where to get the bits to make them. Different methods of varroa treatments were discussed at length and it was stressed that the strip method using Bayvarol and Apistan was now pretty ineffective because of resistant mites. He also told us of an outbreak of American Foul Brood (AFB) which he had found in Lancashire on bees which had been brought down from Scotland. The supplier of these bees had been checked and more hives destroyed. Using DNA evidence the AFB was found to have originated in Spain. Talk about big brother is watching you, it's amazing how things can be tracked. After we had a cup of tea some people went down to Bill's hives to watch a demonstration of Doug's machine for brushing bees off the frames. This could be used for clearing bees from supers or clearing bees out to make a shook swarm. I think that will be my winter project to make one. Later I spoke to Dave Rayner and was amazed to hear he has two more courses for beginners starting in September and they are both fully booked already. The next course is planned for January and there are already people booked on this so if you want to have a go you better book in quickly. The new Cup and Shield in memory of Ken Gaiger have arrived and they are wonderful. They are going to be presented as an education thing to try and encourage more members to go to classes or to improve their standard of beekeeping. The next meeting is the Bar Bee Que at Rob and Angela Moyle's house in Twiston. Please book with me if you want to come so I know numbers.

### Home made foundation

Having a pile of surplus bees wax and living some way from any of the dealers that operate any kind of wax foundation exchange, I decided to have a go at making my own foundation. There are a couple of different foundation moulds at Wandlebury available for members to borrow. As neither had been signed out for some time, I decided to borrow them both and have a go. The first mould is a pair of plastic sheets designed to be placed either side of a plain sheet of wax. The whole lot is then passed through a mangle! Where do you find a mangle these days? I tried it by clamping it between two boards in a vice or in a work mate but it did not work so I gave up with that mould.



The second mould is two pieces of concrete in a frame. The comb is moulded in the concrete blocks. The first lesson I learnt was that there has to be lots of release agent. If the wax sticks to the mould there is no way to get it off other than melting it. The concrete is quite fragile and the wax cannot be scraped off without damaging the mould. I have learnt this one the hard way and spent some time with a blow torch gently melting the stuck wax out of the mould. I eventually found that a very strong washingup liquid solution works well, but you must renew it between each moulding. Just because the concrete still looks wet, the wax will stick if a new layer of Fairy is not added. The next task was to spread the wax quickly but evenly. A small jug of molten wax seems to do the job adquately





Bring the other concrete block over onto the wax and apply some even pressure for a few moments. The colder concrete quickly sets the wax, and the mould can be opened and the sheet of foundation peeled off the mould. All that is left is to trim the wax to the size for the frame.





I used a sheet of bought wax as a guide. The home made foundation is not a strong as the bought stuff. It is about twice as thick as the professionally made foundation. I have not tried wiring it but use it in plastic frames that have additional supports. Was it worth it? Probably not. It is a lot of hassle and I managed to ruin about ever other sheet, either sticking to the mould or not getting an adequate cover of wax over the mould. It was all right for emergency use but the bees were not that keen on it. May be the Fairy Liquid left a smell they did not like. They have drawn it out but it was the last sheets in the super that they touched.



With thanks to Cambridgeshire BKA

### RARE BUMBLEBEE COMING BACK TO UK

Bumblebee numbers have been dropping around the world but a bumblebee which is extinct in the UK, is to be reintroduced from New Zealand. The short-haired bumblebee was exported from the UK to New Zealand on the first refrigerated lamb boats in the late 19th Century to pollinate clover crops. It was last seen in the UK in 1988, but populations on the other side of the world have survived. Now Natural England and several other conservation groups have launched a scheme to bring the species home.



International rescue

Poul Christensen, Natural England's acting chairman, said; "Bumblebees are suffering unprecedented International declines and drastic action is required to aid their recovery.

"Bumblebees play a key role in maintaining food supplies - we rely on their ability to pollinate crops and we have to do all we can to provide suitable habitat and to sustain the diversity of bee species.



"This international rescue mission has two aims - to restore habitat in England, thereby giving existing bees a boost; and to bring the short-haired bumblebee home where it can be protected." As many as 100 of the bees will initially be collected in New Zealand and a captive breeding plan established, with the aim of eventually releasing them at Dungeness, Kent, where they were last seen.

They will be flown back on planes in cool boxes, and will not be disturbed, according to Natural England, as they will be in hibernation during transit.

The scheme's project officer Nikki Gammans said the bumblebee was a "keystone species" which was key to pollinating around 80% of important crops.

"By creating the right habitat for these bumblebees, we are recreating wildflower habitat that has been lost, which will be good for butterflies, water voles and nesting birds."

Adapted from are article by

Tania Rana (BBC Science) and with thanks to Montgomeryshire Beekeepers Association

### **SOME NICE BEE PICTURES**





# Winter Bees: A different Animal.

The winter bee is different animal from its summer sister, the difference being is brought about by feeding and by lack of work. In late summer and autumn the workers feed very heavily on pollen, and this brings their hypopharyngeal glands back into the enlarged forms as that of nurse bees. At the same time large amounts of fat, protein and animal starch is stored in the now fat body of the workers. This fat body provides an internal store of food which is used to start brood rearing in spring. These changes appear in the workers when they are not involved with rearing brood: in fact the workers life span is effected by the amount of brood food produced and then fed to the larvae.

This same process also happens when the colony becomes queenless has the last workers to emerge from the lost queens eggs do not have any larvae to feed so they go through the same process as the winter bees and so carry on living throughout the summer but rarely survive the winter

This why you get the winter bees living all through the winter with some of them living for as long a six months and that when you do find any dead bees when you carry out your first inspection in spring it will be mostly the old summer bees that have died out and not the winter bees

### CCD - THE 'DISEASE' THAT NEVER WAS

I have always been sceptical about CCD and thought it unlikely that it would be attributed to any new disease - and to be fair, the group that coined the term 'Colony Collapse Disorder' chose the name carefully to avoid implying that any disease was involved. Nevertheless, many were convinced that it was a disease and have spent a great deal of time and effort searching for the elusive pathogen. My view has always been that certain parts of the U.S. beekeeping industry were, if not totally unsustainable, then certainly likely to have severe problems from time to time. We have known for a long while that our bees face many threats - disease, pesticides, stress (both from beekeepers and weather), pests, poor nutrition and that they can usually overcome these when they encounter them singly or in low numbers. However, when many of the threats come together at any one time, the result can be catastrophic. It is exactly the same with humans - we can cope with many problems and diseases one at a time, but when faced with a number of them in combination then we may succumb. Now it seems that most of those researching CCD have come to the same conclusion: CCD is not a disease simply a combination of factors coming together at the same time in what has been described as a 'perfect storm' - with the inevitable result. Reports via the Internet suggest that the crisis is now over and indeed there are so many colonies available for pollination that fees have tumbled in California - an amazing turnaround. So has a great deal of time - and money - been wasted trying to find the cause of 'CCD'? I would say not: our knowledge of many problems affecting bees, such as diseases, nutrition, pesticides and management has advanced considerably - although it is debatable whether the increase in our knowledge played any part in the recovery process. However, I do wonder if governments and taxpayers will be quite so willing to shell out large sums of money the next time it happens! Perhaps it was fortunate that our government allocated the extra £4.3M before the US recovery!

What about losses in other parts of the world? Again I think that there are simple explanations, from N. ceranae in Spain, to problems with pesticide application in Germany, appalling weather in the UK and varroa throughout most of the world. Some problems are avoidable, or treatable, and others are not. As beekeepers our response must be to keep ourselves properly educated so that we can help to minimise the impact on our colonies.

Thanks to
PETER EDWARDS.
STRATFORD-UPON-AVON & DISTRICT BEEKEEPERS
ASSOCIATION.
Via E-Bees

### Simple Anti Swarm Procedure

# by Eric McArthur

A simple but effective swarm prevention method entails removing the queen from a strong colony at the end of the early summer nectar flow immediately after the removal of the honey harvest - before the colony has made any swarm preparation – usually around the first week in June. At this point in time the colony is very strong, but it has nothing to do – so it will invariably swarm! The beekeeper can forestall this urge relatively easily, especially when working with marked queens. It is necessary to have at least a spare brood box, super, roof, crown board, floor and sufficient deep frames to fill the spare brood box.

Simply find the queen and place her with the comb she is on in the new hive, which has had the entrance blocked — a strip of cloth or a strip of sponge is good! Remove a couple of good store combs covered in bees from the original hive and place them one on each side of the comb with the queen. These combs should not have any eggs or open brood in them. Shake bees from a couple of the remaining combs in the original hive into the new box. Fill the new box out with empty, preferably drawn comb, but foundation will do at a pinch — put the crown board in place. Make the new hive secure and bee tight and move to another apiary at least a couple of miles from the parent site.

This 'shook swarm' should be fed at least 3 litres of light sugar syrup - 0.5 kg sugar to 1 lire of water over the next couple of weeks. This will get the queen laying steadily and within about three weeks she will probably have laid up around 3 – 4 full frames of new brood.

Meantime, back at the old apiary! After the removal of the queen and the two store combs – replace these combs with empty combs at the side of the box. This original hive now has no queen, but will have an abundance of eggs and brood in all stages. Give the colony a good feed of light syrup as for the shook swarm. Close the hive up! Now here is the clever bit, count 10 days after the queen was removed, subdue the queenless colony and examine all the combs containing brood. There will be quite a large number of sealed queen cells in the colony – select the comb with the best looking cell – one that is nicely formed and located near the centre of the comb face. Replace this comb in the hive, ensuring that the cell is not damaged in the process and go through all the remaining combs containing queen cells and destroy EVERY remaining queen cell – this will probably necessitate either shaking or brushing all the bees from each comb to ensure that no cell is missed.

Return to the comb with the selected cell, which now has to be examined for other queen cells – this comb might also have multiple queen cells on it, so brushing or shaking bees the bees CAREFULLY from the comb could be required. I prefer to shake bees – and a trick I learned from Athole Kirkwood, of Heather Hills Honey Farm fame, away back in the early 70s was to take the selected comb by the lugs and turn it upside down so that the lugs are the lowest edge of the frame – shake the frame by gently vibrating your arms. This procedure will get the bulk of the bees off the comb faces and safeguard the queen in the selected cell from being shaken into the tip of the cell where she could get damaged.

Once the hive has been reduced to ONE queen cell close it up, feed as directed previously and within some two weeks you will have a brand spanking new queen.

Meantime the shook swarm is growing apace! Once the new queen has been proven to be laying a good pattern of worker brood the beekeeper can now cull the old queen and unite the thriving shook swarm bees to the newly requeened colony, using the Newspaper Method. A few days later the colony can be reduced to a single brood box if so desired. The result of this procedure is a new queen heading a colony which will be in great shape for the lime, willowherb and balsam and in brilliant shape for the heather.

This colony will not swarm in the current year – just give it room to expand and store.

This method is a derivative of the Demarree System but without the encumbrance of having two brood boxes on the same stand.

With Thanks to Eric Mc Arthur and the Scottish Beekeepers Association

### **BEGINNERS PAGES**

Below I have, for beginners put in some figures for times from when bees hatch from the egg.

	Worker	Queen	Drone
Hatching of the egg	3	3	3
Larval first moult	3/1/2	3/1/2	4
Second larval moult	4/1/2	4/1/2	5
Third larval moult	5/1/2	5/1/2	6
Fourth larval moult	6/1/2	6/1/2	7
Cell Sealed	8-9	8	10
Spinning the cocoon	10	9	12
Development inside the cell			
Fifth moult to pupae	11	10	14
Pupa Eyes pale red	14		
Pupae eyes Red	15	12	
Pupae eyes purple and thorax yellow	17	13	
Pupa abdomen yellow	18	14	
Pupae antenna darkens	19		
Moult of pupae into an adult bee	20	15	22/1/2
Emergence from the cell	21	16	24
Mature and ready to mate			37

The above figures are taken as an average and can vary owing to high temperatures inside the hive.

Its best you study the above as the times when the bees hatch from the cell is very important with regards to swarm control.

Some of the above are relevant if you are taking exams but some like stated are important in the very day to day management of your hives.

Michael Birt.

# **COLLECTING SWARMS**

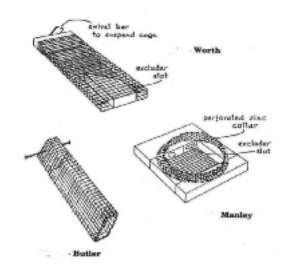
I MUST REMIND YOU ALL THAT THERE IS A RIGHT WAY AND A WRONG WAY TO COLLECT SWARMS.

THE RIGHT WAY IS TO GET THE SWARM INTO THE SKEP OR BOX, AND THEN LEAVE IT ON SITE UNTIL DUSK IN ORDER TO COLLECT ALL THE FLIERS.

THE WRONG WAY IS TO REMOVE THE SWARM IMMEDIATELY, LEAVING HUNDREDS, OR PERHAPS THOUSANDS OF LOOSE BEES BEHIND. IF THE SWARM HAS BEEN HANGING FOR SOME TIME, ESPECIALLY OVERNIGHT, THESE BEES WILL NOT REMEMBER WHERE THEY CAME FROM AND MAY THEN BE A NUISANCE FOR MANY DAYS. LEAVING BEES BEHIND HAS SERIOUS IMPLICATIONS, NOT ONLY BECAUSE MANY BEES FLYING AROUND CAN BE VERY FRIGHTENING FOR NON-BEEKEEPERS, BUT THEY SOMETIMES BECOME AGGRESSIVE AND STING ANYONE IN THE VICINITY. THIS COULD EASILY LEAD TO LEGAL ACTION, AS A BEEKEEPER WHO AGREES TO DEAL WITH A SWARM AUTOMATICALLY ASSUMES LEGAL LIABILITY FOR THE SUBSEQUENT HANDLING OF THE SITUATION AND LEAVING BEES BEHIND IS A CLEAR INDICATION OF NEGLIGENCE.

THE BBKA WEBSITE HAS A LEAFLET ON THE COLLECTION OF SWARMS AVAILABLE FOR DOWNLOAD; THIS STATES: UNDER NO CIRCUMSTANCES SHOULD YOU AGREE TO ATTEMPT SOMETHING FOR WHICH YOU ARE NOT QUALIFIED, SKILLED, EQUIPPED AND INSURED. ONCE YOU APPROACH A SWARM WITH THE INTENTION OF COLLECTION AND REMOVAL IT BECOMES YOUR PROPERTY AND YOUR RESPONSIBILITY TO PROTECT BYSTANDERS. COLLECTING A SWARM PROPERLY IS A GREAT OPPORTUNITY TO ACT AS A GOOD AMBASSADOR FOR BEES AND BEEKEEPING; DOING THE JOB BADLY BRINGS THE WHOLE CRAFT INTO DISREPUTE.

### ONE WAY OF INTRODUCING A NEW QUEEN



Last month I outlined the conditions and preparation for the safe introduction of a new queen into a colony. Without this care she could be lost but how?

The main ways are:

- If you have not de-queened the receiving colony then the old queen, even if failing or drone laying, may kill the new one.
- Laying workers may be present and one could even be a 'pseudoqueen', these upstarts will also kill a new queen.
- The bees may not like the new lady and 'ball' her.

Introduction can be by adding a queen cell, a virgin or a mated and laying queen. As I said last month the one you use depends on what the receiving colony expects/wants. The methods used to add these will obviously be different but fall into two general methods of direct addition or through a secondary route using a nuc. I will start with direct addition as you will need this to make up the nuc!

### **Queen Cages**

When introducing a mated or virgin queen, a degree of protection is often needed to prevent the bees 'balling' her. In this an agitated ball of workers, usually older ones, forms a walnut sized ball around the new queen. This ball will often breakup later to release the queen but she can be killed inside the ball. However, even a released queen is likely to be damaged by the workers biting her wings, feet and antennae – this will lead to supersedure or a failure to mate if it was a virgin. If after all your precautions you should see a queen being balled then according to Snelgrove, rescue is possible by dropping the ball into a cup of water to disperse it. The damp queen can then be picked out to fight another day! Beekeepers being inventive people have produced many variations on the cage theme but three are shown opposite. However, they all work by protecting the new queen while the colony gets used to her and she attains the colony odour. The fine mesh reduces the risk of damage but allows the queen to be fed and licked but her feet can still get chewed! To help stop this some cages have an area with no mesh where the queen can retreat until things quieten down. Some cages require the beekeeper to revisit the colony and if all is quiet, no ball of agitated bees around the cage, then to manually release the queen or at least open a release route. Others have a tunnel(s) blocked by candy which the colonies workers eat away to release the queen after a settling in period. Some like the Worth and Manley cages have two tunnels a short one with candy and a queen excluder cover which allows a few bees to reach the queen to clean her before the main longer tunnel of candy is eaten through to let her into the main colony. Some questions people ask about the use of cages:

### 1. What is the best position for a cage?

Place the cage between two frames of brood, the younger the better, as this is where a queen would be found and is also covered by young less aggressive nurse bees eager to feed her.

- 2. If it is a travelling cage with a bought and newly delivered queen do I add her immediately and what about the attendants? I would give the cage of bees a drop of water and leave it in a cool dark place to calm down after the postal trauma but I am not sure it matters. As for the attendants I have introduced with and without and had equal success but care must be taken if you remove them least you lose the queen. Release them in a car with all windows closed or in a sealed room by the window so should the worst happen the queen will fly to light and can be picked off the glass.
- 3. What is the best time of day to introduce a cage queen? My view is that it is not critical but ideally around midday to late afternoon on a sunny day with a good flow on. The reasoning is that the foragers will be out and so the hive population is smaller and those at home will be busy and happy. This means that the queen's addition may go by unnoticed or less so.

#### 4. Should I use smoke?

To be successful introduction should be swift and with the minimum of disturbance and so the less smoke the better. A lukewarm water spray (can be scented and/or weak sugar) can be useful as it gets the bees cleaning up and so distracts them.

Remember cages help but are not perfect so do all you can to smooth the process.

More methods next time.

# One Species of Asia Bee found over here in Thailand Apis Dorsata. The Giant Honey Bee





PICTURES OF A NEST IN OUR GARDEN IN BANGLAMUNG,

Apis dorsata, the Giant honey bee, is a honey bee of southern and southeastern Asia mainly in forested areas of Nepal, Thailand, Vietnam and Cambodia. The subspecies with the largest individuals is the Himalayan cliff honey bee - Apis dorsata laboriosa - but typical Apis dorsata workers from other subspecies are around 17-20 mm long (nearly one inch).

Saipin has taken a photograph of an Apis dorsata nest, in our garden in Thailand. The comb is approximately 1.5 metre across.

Nests are mainly built in exposed places far off the ground, on tree limbs and under cliff overhangs, and sometimes on buildings. Apis dorsata is an aggressive bee and has never been domesticated (as they do not use enclosed cavities for nesting). They can be extremely dangerous if the colony is provoked. Each colony consists of a single vertical comb (sometimes approaching 2 square metre) suspended from above, and the comb is typically covered by a dense mass of bees in several layers. When disturbed, the workers may exhibit a defensive behaviour known as defense waving. Bees in the outer layer thrust their abdomens ninety degrees in an upward direction and shake them in a synchronous way. This may be accompanied by stroking of the wings. The signal is transmitted to nearby workers that also adopt the posture, thus creating a visible (and audible) "ripple" effect defer across the face of the comb, in an almost identical manner to an audience wave at a crowded stadium.

These bees are tropical and in most places they migrate seasonally. Some recent evidence indicates that the bees return to the same nest site, even though most, if not all, the original workers might be replaced in the process. The mechanism of memory retention remains a mystery.

Despite its aggressive nature, indigenous peoples have traditionally used this species as a source of honey and beeswax, a practice known as honey hunting.

Pictures Taken by Saipin Birt

Article by Michael and Saipin Birt

### MAKING UP A NUCLEUS

# Without finding the Queen

# Not just for Beginners but for FOR EVERYONE.

This system is for everyone, as we should all try to raise a nucleus each year, either to increase our stocks for the following year, for re-queening an existing stock or, and most important, to have a reserve stock should our main and possibly only stock, fail to over Winter.

A good time to do this is in mid May to mid June as this procedure will introduce fresh breeding space thus helping to reduce the chances of swarms. It can also act as for a swarm control. If Queen Cells should be found to be present, just follow the instructions but where it says "and one of eggs" use the comb with Queen Cells instead.

Ensure there is only one unsealed Queen cell on this frame all others being destroyed.

### FIRST STAGE

Place an empty brood box (B) onto an inverted roof. From the main stock (A) take out two frames of food, one frame of sealed brood and one of eggs. As each frame is taken out brush the bees back into the hive and place the bee-less frames into (B) in this order: food + comb of eggs + brood + food.

Fill up the space in (A) with empty drawn brood frames or foundation - two either side of the brood nest.

### SECOND STAGE

Put the nucleus box (B) over the original brood chamber with a queen excluder separating them. If there are any supers, these can go back on top of the nucleus in box (B).

The nucleus box (B), when placed upon the main stock box (A) is devoid of any bees. What will happen now, is that young nurse bees will come up through the excluder to cover the four frames. Allow a few hours for this to take place, possibly either side of lunch for example.

### THIRD STAGE

After this time, the nucleus in box (B) with adhering bees are transferred into a nucleus hive. If no nucleus hive is available, the brood box (B) can be set up on its own floor using dummy boards on each side of the four frames and reduce the entrance to a 1/2 inch opening.

Feed the nucleus daily with a slow feeder and the bees will raise their own queen. Do not open up again for at least three weeks and then only look for eggs. The nucleus can be placed a few feet away from the parent colony or anywhere in the apiary as the nucleus has only young bees that will not be old enough to have undertaken their orientation flights whilst in the parent hive. You have thus created a nucleus without the need to first see the queen.

Better Still, It is possible to select the eggs from which you wish to raise the queens. When selecting the brood frames, choose two that have only sealed brood. Then, cut a two inch square out of one of the frames and into this space, slot in a two inch square of eggs cut out of a frame taken from the best stock in the apiary or even eggs from a specially good stock from someone else. This is known as the 'patch method'. With only this patch of eggs available, this is where the bees will raise a selected Queen. Furthermore, with an abundance of young bees, the queen cells will get more than sufficient attention and queen substance.

If the weather should prove to be cold how about putting the nuc on top of a strong stock using a ventilated, Curry board, until it is well established.

With Thanks to Bill Ainsworth

### Management of a Nuclei

Nuclei require regular attention. They must not be allowed to run short of food, feeding being resorted to when necessary, and continued, if need be, twice a week. During a dearth of honey feeding is valuable for stimulating the queen and drones to fly.

If the queen has got lost or injured, or has become a drone-breeder, a ripe queen-cell must be given in her place as soon as possible. A frame of sealed brood from a nucleus that can spare it should be given to keep up the population. About half-an-hour after a queen gets lost the bees become more or less excited and restless. They start humming, and a few will run or fly out of the entrance and hack again. The same symptoms are shown when the queen is balled, and also occasionally, when nothing is wrong. If the hive is rapped or examined the humming develops into a roar. For several days after the queen is lost this roaring may be induced by rapping or examining. A nucleus that does not roar in the least when examined is sure to contain a queen or occupied queen-cells.

When the honey-flow begins to decline special precautions have to be taken to guard against robbing.

little better.

- (1) Keeping the entrances of the nuclei small—pieces of section may be tacked over them, or a small piece of foam rubber inserted to reduce their size. No bigger than 6mm by 5mm (1/2 by 3/8) is recommended by most books (2) Maintaining in each nucleus a sufficient population of bees between the ages of one and three weeks. This is best done by the supply of sealed brood in good time. Very young bees are powerless against robbers and old bees are
- (3) Opening the hive as a rule only in the evening during the hour or two preceding sunset. Robbers quickly learn to follow the smoker and will pounce down on a nucleus directly it is opened, and having once gained an entrance, other bees from the robbing hive or hives will soon join them, but darkness puts a stop to their depredations. Feeding is best done at dusk. In America soft candy is sometimes used instead of syrup, because it causes less excitement. Fresh nuclei should not be formed when the honey-flow is declining or over. Prospectors are sure to be prowling about then, and they are wonderfully quick in discovering a newly-formed nucleus which, having no spirit to resist, will be completely overcome in two or three hours by the host of robbers which in a trice follow on the heels of the innocent-looking discoverers. Of course, no honey or syrup should be dropped about the apiary, and the door of the honeyhouse should be kept strictly closed at all times. A solar wax extractor is not desirable in a queen-rearing apiary: the smell of the wax arouses the robbing instinct. (this is new to me! – never too old to learn. D.G.M) Robbers make robbers, and it is much better and easier to prevent the vice beginning than to try to cure it. The nuclei should be examined at least every tenth day. Examinations should not take place in windy weather, for this may induce balling, and consequently the maining or killing of queens. The combs, when being examined, should be held over the open hive, so that, if the queen drops off, she will not be lost. A card for notes should be tacked on the underside of the roof of each nucleus hive. On this should be written with an ordinary lead pencil at the time the queen or queen-cell was given, her parentage and the date of emergence, and subsequently every event of importance—for instance, the estimated date at which laying commenced and, if the queen is kept long enough, the colour and temper of the workers she produces, and finally the date she is removed, this being followed by a line drawn across the card.

The queen should not be removed until most of her eggs first lay have hatched, or many of these will perhaps be destroyed. If she can be left in the hive a few days longer, all the better. When she is taken away, a ripe queen-cell, from which the new queen is due to emerge within a day or two, is given to the nucleus in the queen-cell protector, the date she is due to emerge and her parentage being noted on the card. It is not seen to be satisfactory to introduce hatched virgins to established nuclei as too many are killed.

At the end of the season three nuclei may be united to form one strong colony, however, there should be no difficulty in wintering a nucleus on five full-sized combs in the mild climate of Cornwall, provided it is strong and the combs are full of stores. When uniting nuclei at the end of the season it is very important—to ensure that the combs are fairly full of stores. If they are not, the queen is very likely to be killed. This catastrophe can, however, be prevented by caging her for three days and feeding the colony heavily.

The bulk of the text above was taken from 'Queen Rearing in England' by FWL Sladen. The article originally appeared in the British Bee Journal 1904. Some of the wording is strange to the modern ear – but the knowledge contained in it is sound and worth considering.

# Artificial swarm without finding the queen

- STEP 1. Move the parent stock with the queen cells to one side. In its place put a floor, then a queen excluder, a clean brood box with frames of drawn out comb or foundation. We will call this Box A.
- STEP 2. Take out four of these combs and place them on one side so as to leave room for the shaken bees to go in.
- STEP 3. Shake and brush all the bees from the parent stock into Box A with the exception of any combs containing Queen cells. These should be carefully brushed clear of bees. The shaken frames should be placed into another clean brood box (Which we will call Box B) in the order that they were removed from the parent stock, at the same time destroying queen cells as you go but retaining two good looking unsealed cells that we are going to use to raise into queens, If we can select two cells on two separate frames, so much the better, as it will save the bother of cutting out queen cells at a later time
- STEP 4. Mark the queen cells by placing drawing pins in the top bars directly above the cells.
- STEP 5. Brush all the bees out of the old brood box so the old hive is now completely empty.
- STEP 6. Fill up the Box A with the four frames of comb or foundation previously put to one side. On top of this new shaken swarm fit another queen excluder, then the supers.
- STEP 7. Finally add Box B which contains the frames of brood from the parent stock from which we have just brushed the bees. Fit the cover board, add a feeder with sugar syrup and fit the roof.

What happens next?

The nurse bees will go up to the brood in Box B within minutes and re-form the parent stock complete with the two Queen cells but no Queen. As this stock is isolated from the swarm and the old Queen by the supers and a queen excluder, the nurse bees are certain to take good care of the Queen cells.

In the bottom box, Box A, is the shaken swarm on new foundation with the old Queen and a queen excluder to prevent any attempt by the Queen and bees to abscond. We have food for the bees in the top and bottom boxes.

STEP 8. In four days time, we need to get to the shaken swarm in Box A. There is probably too much all at once but we have to put on one side the following:

The roof, the feeder, the cover board, Box B, the supers and the queen excluder which will then leave us with access to Box A.

- STEP 9. Go through the shaken swarm in Box A to see if we can find the queen or signs of a queen (eggs) If we do, then we can remove the queen excluder we placed between the floor and the brood Box A. The bees will not now abscond having brood to take care of. If no queen or sign of a queen (eggs) is found in the swarm in Box A then give it one of the queen cells from the parent stock in Box B
- STEP 10. Replace the queen excluder and supers.
- STEP 11. Now go into the parent stock, Box B (the one that was on top), and destroy one of the queen cells unless you are going to use it as in STEP 9. At the same time check the parent stock for new queen cells started in the last four days and destroy them. (Or you could use them to create other nucs). Only one Queen cell should be left in Box B.
- STEP 12. The parent stock can now be separated from the swarm, with a ventilated board (Hoarsely board or Curry board) with the entrance to the rear, or moved to some other part of the apiary as another stock. Keep feeding the parent stock.

We should now have one swarm nicely secure and ready to get some honey as well as a nucleus that should produce a new Queen and make a good stock for next year.

# How Native are 'Native' British bees?

I think this is a valid question. Imports of queens, mainly from Italian strains began in 1859. In 1906, Isle of Wight (IoW) Disease

appeared, devastating many apiaries, and allegedly wiping out the native bee population. Many beekeepers were killed in World War 1 and this doubtless contributed to the feeling of crisis. Very large numbers of Italian and other queens, held to be better suited to modern

methods of beekeeping, were imported from the Continent. Coincidentally, a series of hot summers created conditions for them to thrive here. The native bee appeared to be gone forever. Imports, on a smaller scale, continue to this day. However, in

the 1950's, Beowulf

Cooper found many beekeepers whose stocks had not been affected by IoW disease, and who were still keeping strains which looked remarkably like the native bee. Specimens which were collected here before 1850 do exist in various museums, and bee fragments have been collected from an archaeological dig from Viking age York, and dated to around 1000 AD. These have been shown to be

morphologically identical to many strains still existing in the UK.

So we have good reason to believe the native bee, or at least its genes, is still with us. It belongs to the Northern European subspecies, or 'race', Apis mellifera mellifera (Amm). The situation, though, is complicated by several more factors. In the panic caused by IoW Disease, large numbers of Amm queens were imported from Holland. It has been suggested that British Amm strains are descended from these. Undoubtedly, their genes will be with us, in fairly large numbers. Then natural selection has to be considered.

The climate of Britain, particularly in the north and west, is marginal for the honeybee. Many strains will struggle to survive here; for instance, a strain which winters with the very large cluster which is characteristic of bees from warmer climates will be likely to starve in a long winter which follows a bad summer. Doubtless many such colonies have been lost over the last couple of years. It was noticed during World War II, when imports of queens from the Continent obviously stopped for several years, that bees became noticeably darker. A dark colour is the most obvious feature of Amm, but it is a poor indicator; black strains have been recorded which were Italian in every other characteristic. Other 'native' characteristics may be selected for just as strongly.

At the recent Spring Convention, one exhibitor showed examples of bee strains he had to offer. One consisted of 'British Blacks'; he had believed them to be native until he had them genetically tested. Superficially, they looked very much like native bees, but they were in fact hybrids. For many years German beekeepers tried to maintain 'pure' Carniolan strains in an attempt to replace the native population. It has now been shown that they ended up with a hybrid which looked just like the Carniolan bee.

Many desirable, and other, characteristics have probably been lost from surviving 'native' strains. Once there was a wide variation from one region to another, with prolific, sometimes swarmy, strains in the lowlands, and frugal, rarely swarming, strains in highland areas. The former appear to have disappeared, probably hybridised out of existence as these areas often suited the imported bees. Highland areas retained far more of their native bees, and it is from these that modern 'native' strains come. Mine originated from West Cornwall, and are typical of these bees. They are quiet on the comb, good tempered, swarm infrequently, and form smallish colonies. Winter clusters are small, and they do not need routine feeding. They build up rather slowly in spring, and I want to try to select for a faster build-up, with a peak around midsummer rather than a month later. But are they truly native? I don't believe that there is any completely unhybridised strain left in Britain, but they've probably got as good a chance of being indigenous as any. BIBBA (the Bee Improvement and Bee Breeders' Association) has been genetically testing native-looking strains, and I'm sending them a sample of my bees. Hopefully, I might soon know a little more.

The local bees are a mixture. In the last year, I've had experience of five colonies which were unrelated to mine; three swarms and two colonies which were passed on to me. All had the stocky build and narrow tomenta (bands of hair on the abdominal segments) which are characteristic of Amm, along with the correct wing characteristics. This latter is significant, as when I've handled bees from strains which have been supplemented by imported queens, the wing characteristics have been all over the place. All had a mixture of black and

yellow or brown-banded workers, a clear sign of non-native genetics. Four out of the five had the long hair of Amm, and of the three I had over the winter, two had small clusters, and built up as slowly as my own strain. The other had a cluster the size of a football, and rapidly expanded to form a very large brood nest occupying two boxes. A colony like this will not survive long without feeding! None of the five was as good-tempered or quiet on the comb as my own strain, which alone is good enough reason to re-queen them.

Clearly, many 'native' characteristics are present in the local bees, though imported genes show their influence as well. If imports were to cease, natural selection would probably lead to a bee which looked rather like the original native type. It would not be native, but would that make very much difference?

With thanks to Robert Brenchley. Warwickshire Beekeepers.

### DRONES (A LITTLE ABOUT THEM)

WHENEVER THERE ARE PROBLEMS WITH NASTY BEES WE ALWAYS SEEM TO HEAR THE CALL OF RE-QUEEN AS IT WILL SORT THE BEES OUT AND THEY WILL BECOME PASSIVE AGAIN. THE SAME GOES FOR THE SPREAD OF THE VARROA MITE AND WHAT THEY SAY ABOUT BRINGING QUEENS INTO THE COUNTRY. LET'S TAKE THESE ISSUES ONE AT A TIME AND MAYBE WE MAY SEE THAT IT'S NOT ALL DOWN TO THE QUEEN AND MAYBE TO THE OTHER BEES IN THE HIVE, NOTABLY THE DRONES.

# FIRSTLY NASTY BEES.

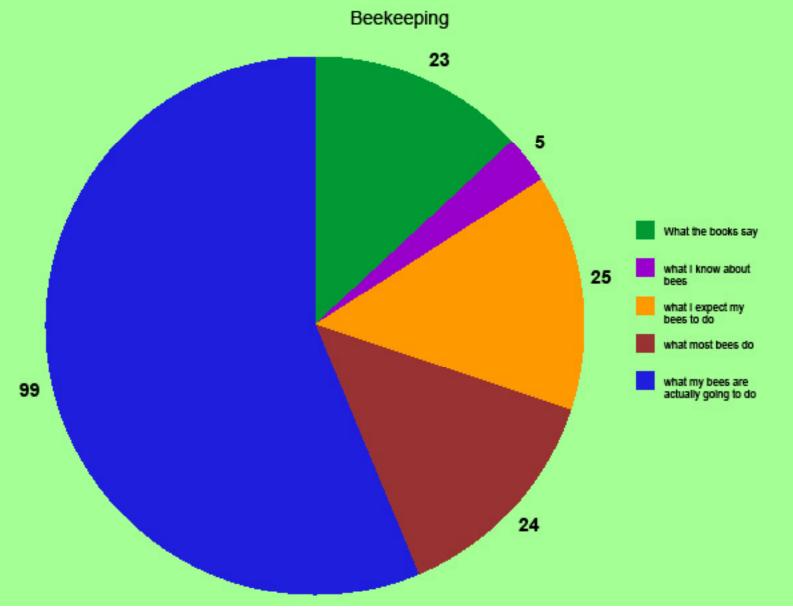
IF YOU DO RE-QUEEN, YOU STILL HAVE THE DRONES FLYING AND THEY WILL BE THERE ALL SEASON. YOU WILL STILL HAVE THE GENETICS OF THE OLD QUEEN IN THE DRONES FOR THE WHOLE SEASON AS THEY, UNLIKE THE WORKERS LIVE LONGER THAN 6 WEEKS. SO WHAT YOU HAVE IN THE HIVE IS A NEW QUEEN AND STILL ALL THE DRONES WITH THE TRAITS TO BE NASTY OLD QUEEN FROM BEFORE. THESE DRONES WILL FLY FROM THE HIVE UP TO 5 MILES AND WILL MATE WITH BEES FROM OTHER HIVES AND WILD COLONIES ANYWHERE IN THIS 5 MILE RADIUS. WHAT YOU THEN HAVE IS MAYBE A QUIET HIVE IN YOUR APIARY SURROUNDED BY MAYBE WHO KNOWS HOW MANY UNCONTROLLED COLONIES OF BEES INCLUDING MANAGED AND WILD COLONIES WITH THE NASTY STRAIN OF NEW QUEENS FULL OF THE SAME GENES AS THE OLD QUEEN FROM YOUR HIVE ALONG WITH ALL OTHER UNKNOWN QUANTITIES FROM AROUND THIS 5 MILE AREA. ALSO IF YOU HAVE, SAY ONE HIVE WHICH ARE NASTY OUT OF SAY 5 HIVES AND YOU RE-QUEEN YOU WILL STILL HAVE THE OTHER 4 HIVES EXPOSED TO THESE DRONES WHO ALL THEY ARE WAITING FOR IS A NEW QUEEN TO EMERGE SO THEY CAN ALL CHASE AFTER HER AND MATE, THEREFORE PUTTING THE NASTINESS BACK INTO THAT COLONY FROM WHERE THE VIRGIN QUEEN EMERGED. REALLY THE ONLY WAY FORWARD IS TO HAVE ALL THE BEES IN THE AREA THE SAME STRAIN AND THAT IS WHY NO QUEENS FROM AWAY SHOULD BE BROUGHT INTO THE AREA AND BY THE AREA AND I MEAN A WIDE AREA NOT JUST A SMALL AREA. AND THAT STRAIN SHOULD BE THE BRITISH BLACK. YOU THEN HAVE HALF A CHANCE OTHERWISE IT WILL ALL BE A WASTE OF TIME.

NOT TO MANY BEEKEEPERS EVEN REALISE HOW IMPORTANT THE DRONES ARE TO THE HEALTH AND WELL BEING OF THE HIVE AS WITH BEING SO FEW AS COMPARED TO THE NUMBER OF WORKERS THEY ARE CONSIDERED UNIMPORTANT, BUT LIKE EVERYTHING IN A SPECIES WHO HAVE EVOLVED OVER MILLIONS OF YEARS THEY HAVE EVOLVED INTO WHO, WHAT, AND HOW THEY ARE AND FOR MANY A GOOD REASON. THE VARROA MITE KNOWS THIS, THAT'S WHY THEY TARGET MAINLY THE DRONE CELLS AND NOT THE WORKER CELLS, WHICH BRINGS TO THE NEXT ISSUE OF

### VARROA, THE SPREAD OF VARROA AND WHAT THEY SAY ABOUT BRINGING QUEENS INTO THE COUNTRY.

AS FAR AS BRINGING QUEENS INTO THE COUNTRY AND VARROA, THE DAMAGE AS BEEN DONE AND CAN NEVER BE REPAIRED. ALL THAT CAN BE DONE IS TO RESTRICT OR BETTER STILL BAN THIS ACTIVITY WHICH IS MAINLY CARRIED OUT BY SOME IRRESPONSIBLE COMMERCIAL BEEKEEPERS THAT ARE IN BEEKEEPING FOR PROFIT AND ALSO SOME HOBBY BEEKEEPERS WHO KNOW NO BETTER. SO HERE WE HAVE IT. NOW WE COME TO THE ISSUE OF HOW IT'S MAINLY SPREAD. LIKE I STATE ABOVE, THE VARROA MOSTLY TARGET THE DRONES CELLS AS FOR SOME REASON THEY TEND TO GO FOR DRONES AND MAYBE THIS IS ONE OF THE BIG REASONS FOR THE SPREAD OF VARROA AS YOU HAVE DRONES TRAVELLING 5 MILES FROM THERE HIVE IN SEARCH OF QUEENS TO MATE WITH AND ALL THE TIME COMING INTO CONTACT WITH OTHER DRONES WHO AGAIN WILL TRAVEL 5 MILES SO IN NO TIME YOU HAVE A LARGE AREA INFECTED ON ALL SIDES OF THE ORIGINAL SITE. SO INITIALLY IT WAS THE IRRESPONSIBLE ACTION OF BOTH BEEKEEPERS THAT BROUGHT IN THE VARROA AND THE GOVERNMENT ALONG WITH THE BBKA WHO SHOULD HAVE HAD MORE FORESIGHT FOR ALLOWING IT TO HAPPEN. MAYBE WITH SOME OF THE TALK AND THE NEW GUIDELINES THAT AS BEEN BROUGHT OUT BY DEFRA IN MAY 2009 THE ISSUES MAY BE ADDRESSED BUT REALLY IT'S A CASE OF CLOSING THE STABLE DOORS AFTER THE HORSES HAVE BOLTED.

With Thanks to Bob Fulton



### BEE HEALTH - EUROPEAN FOUL BROOD

The second of the real nasties. – European foul brood (EFB). It is unfortunate that the name is similar to that for AFB which we discussed last month, because the two diseases are quite different, the only similarities being that they are both caused by bacteria, they are both notifiable diseases and their effects can be quite devastating. Having said that EFB can be present in a colony for many years without killing it and in many countries it is not even notifiable. EFB is probably caused by the bacterium Melissococcus plutonius and is often much more difficult to spot, and diagnose, than AFB. Notice the 'probably'. This is because other bacteria move into an infected larva and,

all though these are usually regarded as secondary invaders, it may be that they have a closer relationship to M. plutonius than has been thought. The signs to look for are:

- problems in unsealed brood.
- larvae losing their white colour and becoming yellow, green,
- · larvae lying in unusual positions in the cells
- larvae losing their segmentation, so that they appear like melted wax.
- sometimes a bad smell.

The bacteria causing the disease are found in the gut of the larva and basically starve it by eating its food. Where larvae are very well fed they can survive and live to re infect others, where larvae are not so well fed they tend to die. Nurse bees often remove diseased or dead larvae and, providing that the bees are hygienic and that there are not too many sick larvae, they can keep on top of the problem. However,

once a higher proportion of larvae succumb, the colony becomes overwhelmed and then goes downhill rapidly. It requires vigilance to notice EFB in its early stages. Often only one or two affected larvae can be seen, so shaking all the bees off the frames is essential As with AFB, if you suspect the disease you must tell your Bee Inspector immediately. (S)he will then confirm diagnosis, put a standstill order on the apiary and instigate treatment, which may vary:

- destruction, as with AFB (see WB for July) if the colony is badly infected
- treatment with oxytetracycline (OTC), an antibiotic, if the infection is lower. This is normally accompanied by a shook swarm where all the bees are shaken onto new foundation and
- the brood destroyed.

   shook swarm without OTC. This is increasingly used as it reduces the use of antibiotics and appears to be very effective where the level of infection is not too high.

EFB is something of an enigma: it can come and go and requires real

care and vigilance on the beekeeper's part to spot it at an early stage. It is related to stress, so that reducing stress levels in the bees is important and, although the bacterium does not form spores, it can hang around on equipment, giving us another reason for ensuring good hygiene and clean combs. Finally, having either AFB or EFB, while upsetting and worrying, should involve no stigma – the only criticism should be levelled at those who do not recognise them or fail to report them to the authorities.

With thanks to Celia F Davis and Warwickshire Beekeepers

# Honey and Wax Handling: Some useful temperatures

Boiling point of bee candy solution (5 lbs (2.71 kg) sugar to 1 pint (1.57 litres) water) (use candy thermometer only).	112.8°
Beeswax starts to discolour when subjected to dry heat.	85.0°
Caramelisation of ling heather honey may occur depending on length of time.	65.5°
Average melting point of beeswax but can vary according to composition.	63.6°
Heating for 30 minutes destroys yeasts to prevent fermentation but can impair some honeys.	62.8°
Maximum for warm water to flush and dissolve honey in machines. Microwave treatment to reliquify granulated honey in jars.	60.0°
Separating and melting granulated honey from cappings 1-2 days.	54.0°
Honey viscosity suitable for pumping and filtering. Small granules melt 8-16 hours.	50.0°
Stirring for cooled bee-candy solution.	48.9°
Maximum for spinning cappings in centrifuge	40.0°
Pre-heating heather and oil-seed rape honey combs prior to extracting (36 hours +).	32.0°
Pre-heating blossom honey combs prior to extracting (12 hours +)	26.7°
Introducing seeding for granulating honey (5%-10% seed). Introducing yeast cultures to mead mixtures.	23.9°
Encourages rapid granulation.	13.9°
Storage of honey in bulk or in jars.	10.0°

Source: Scottish Agricultural College.

# Thanks to Graham Rendall Salisbury Wiltshire Newsletter via e bees

### IT IS SAID THAT.

Low infestation of varroa mite can multiply by up to 25 times during the season. Whereas a high infestation will multiply only 2 or 3 times.

# IT IS SAID THAT.

Autumn feeding needs to be completed by the end of the second week of September to give the bees time to process and store the syrup whilst it is still warm enough to do it.

### IT IS SAID THAT.

Entrance blocks should be inserted with the openings at the top and not the bottom, in case the dead bees block the entrance over the winter.

# IT IS SAID THAT.

A bee can carry up to ten varroa mites and so reduce their foraging ability.

# IT IS SAID THAT.

If a queen mates with her brothers, the workers are likely to abort the eggs.

### IT IS SAID THAT.

One gram of bees wax contains 1250 wax scales.

# IT IS SAID THAT.

In that in the USA over 80% of all their bees come from a breeding stock of just 200 queens.

# IT IS SAID THAT.

Old queens produce different ratios of pheromones to those of young queens.

# IT IS SAID THAT.

If you are trying to get the bees to draw foundation, a flow is required or the bees will start to make holes and disfigure the foundation.

# IT IS SAID THAT.

Bees do not go queenless, beekeepers render them queenless.

Compiled by Michael Birt

# **Global News**

### **USA**

### **VARROA MITE THREATENING HAWAI FOOD PRODUCERS**

The varroa mite parasite that's been killing bees across the country is spreading on the Big Island, threatening local fruit and macadamia nut industries. The tiny bug has escaped a quarantine area around Hilo and spread to Hamakua and Puna.

### **AUSTRALIA**

#### PARASITE HITS PAPUA NEW GUINEA

Papua New Guinea's honey industry says production is declining after a parasite has affected the bee population. The 'Varoa' mite has been detected in PNG's honey producing Eastern Highlands province. PNG's Agriculture specialists say the Varoa mite attaches itself onto the back of bees and kills entire bee colonies. Most honey farmers in the PNG highlands have been badly affected.

### **MALASYA**

#### FAKE HONEY FACTORY RAIDED

Four men, aged between 30 and 70, were detained at Kampung Ketiau, Putatan near here, following a raid by officers from the Ministry of Domestic Trade, Cooperative and Consumerism yesterday. The team from the ministry, assisted by representatives from the Health Department and police, made the raid about 10am after observing the place for three weeks following a public tip-off, the ministry's state enforcement chief, Rosle A. Hamid, said here today. "A check revealed that the honey produced by the group actually contained sugar which had been boiled," he said. The fake honey produced by the group had been distributed mainly in the three districts which were popular with tourists.

### **JAPAN**

#### EX BEEKEEPER HELD IN SMUGGLING CASE

A former beekeeper has been arrested on suspicion of attempting to smuggle Chinese honeybees into Japan, police said Tuesday. Toshihiro Azuma, 35, a former beekeeper in Tondabayashi, Osaka Prefecture, allegedly tried in late April to import about 30 bees from China via international mail without the necessary documentation.

#### <u>USA</u>

# **URBAN BEEKEEPERS IN NEW YORK**

Despite city regulations prohibiting it, hundreds of New Yorkers have kept beehives on rooftops and backyard gardens for years, defying the law in their efforts to create something sustainable in the urban environment. The New York City Health Code prohibits keeping bees and more than 100 other wild animals, including iguanas, venomous snakes, ferrets and elephants. The Health Department maintains that bees are venomous insects that can sting people and in some cases cause a severe allergic reaction.

# <u>SPAIN</u>

### ENSURE THAT THE ORANGE BLOSSOM HONEY HAS A RELAXING AND SEDATIVES EFFECTS

Researchers from the Polytechnic of Valencia, who have studied the orange blossom honey marketed in Valencia, have found that its high quality and excellent organoleptic qualities as relaxants and sedatives are particularly suitable for cases of insomnia.

### <u>USA</u>

### URBAN BEEKEEPERS IN MINNEAPOLIS ARE A GROWING COLONY

The last time David Nicholson appeared in the Star Tribune he didn't reveal his face or last name. Nicholson was trying to stay under the radar because he was engaged in an illegal activity, harbouring honeybees. But now that Minneapolis has ended its decades-long bee ban, stealth beekeepers are emerging from the shadows to talk up their hobby.

With thanks to Scottish Beekeepers Association



Something else what we eat quite a lot of in Thailand. Hope you enjoy and Again with thanks for the artwork to Susie Wright and Scottish Beekeepers Association

# Book Reviews.

### Queen Bee: Biology, Rearing and Breeding

This book aims to cover all aspects related to queen rearing, and is constructed in a notational format. It is set in three chapters: Biology. Queen Bee Rearing Queen Bee Breeding. The first chapter deals with the basic biology of the different sexes and castes and is well supported by diagrams and pictures. The second and main chapter covers aspects of queen rearing, from equipment and methods to introduction and even export of queens. The author describes in detail his preferred methods of cell - raising, but still covers alternative options. This chapter also includes Honey bee nutrition. The final chapter looks at genetics and how they affect colony characteristics. It looks at stock selection and breeding programmes, and includes instrumental insemination. There is a General Glossary and a Glossary of Anatomy and Development. The book covers exactly what it says on the front cover and would serve as a good reference for anyone looking to undertake a programme to raise their own queens. The Table of Contents means the book can be used easily for quick reference or thoroughly read, and covers everything related to the subject of queen rearing; it offers intriguing alternatives to regular known options. Queen Bee: Biology, Rearing and Breeding. By David Woodward is available from Northern Bee Books.

# FORM AND FUNCTION OF THE HONEY BEE, by Lesley Goodman, published by: IBRA-International Bee research

# Association, ISBN 0 86098 243 2.

This book is one of the few, of many that I have bought, that I would like to keep in an unused condition. It is, however, very likely I will wear this book out. It can only be described as gorgeous. The microscopy pictures are absolutely stunning; photographs and artwork are some of the best you will have ever seen in any book on whatever subject. The drawing and descriptions modernise some of the old classics (Dade &Snodgrass). Methodology of instruction is very unusual in comparing the honey bee anatomy to that of man and other animals. Anybody who is studying for modules 4-5 would find this book not only helpful and useful but stimulating, in that it motivates you to study at a depth and breadth that you do not require for the exams.

Unfortunately, the author, Dr Lesley Goodman, is no longer with us. The book has been completed by Prof. Richard J Cooter, Chair of the L.J. Goodman Insect Physiology Trust, and Dr Pamela Munn, Deputy Director of the International Bee Research Association.

Having the book completed by other parties has not affected the quality of the finished article, in fact it is very hard to detect the differing styles of the writers.

Reviewed by John Goodwin of Cheshire Beekeepers Association. With thanks

### Collecting Honey Pots by John Doyle, published by BBNO, £5.40 ISBN 978-0-905652-08-5

Bees collect honey, and some human beings collect honey pots. Honey pots take one back to the bygone era of tastefully set-out tea-tables, where everything had its own, appropriately decorated, container—butter dish, cheese plate, jam pot, sugar bowl, milk jug. The demise of such manners has cost firms like Royal Doulton and Wedgewood their existence, and has made honey pots into collector's items. If you have the slightest interest in honey pots, this book—for £5.40—is a must. John Doyle has taken pains to catalogue every

different type of pot, in every conceivable material (he even deigns to mention plastic), and he discusses the origins of each type. He also covers how to go about buying, repairing, caring for, keeping records on, and displaying your collection. If you want to take collecting further, John Doyle runs the European Honey Pot Collectors' Society, a web-site, annual "Swap Meet", and a monthly magazine—"The Honeypot" - which unaccountably has not yet appeared on "Have I got News for You". I do not collect honey pots, but through reading this book, I could appreciate John Doyle's enthusiasm for his hobby. His descriptions of some of his collection got me so interested that I was disappointed that these were not included in the photos. Perhaps security concerns were involved here. If you can have bee-rustlers, perhaps you can have honeypot burglars!

### Reviewed by Pete Sutcliffe of Cheshire Beekeepers Association. With thanks

Stop Press! Just before the printer's deadline, I received this review from someone who knows what she is talking about. If you are a collector, this is a wonderful book. It covers everything, and I enjoyed reading it. You can pay anything from 50p to £90+ for honey-pots. On page 16 of the book you have a picture of two brown-bear honey-pots. I bought the one on the left for £2—a very fair price. On holiday on the Scottish Borders, staying in Melrose, we went into the coffee shop in the main street, which sold cuddly teddy bears. On the wall, in a locked cabinet, was the honey-pot bear identical to mine, priced at £90. What a difference! And that was a few years ago.

It is getting very difficult to purchase good honey-pots: they are usually very expensive. The less you pay, of course, the more ordinary they are.

John Doyle supplies a lot of very useful information for the collector. For example, I have never seen a wooden honeypot, so I am looking out for that. Also, you do not see many section boxes. I was always told that a collectable honey-pot should be the shape of a hive or skep: if not, the word "honey" should be written on it. Honey-pot collecting is a lovely hobby, and this book is a very good buy at £5.40. I recommend it to anyone thinking of starting a collection.

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