

Bee Talk

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

COMMITTEE MEMBERS CONTACT DETAILS								
MEMBER	POST	PHONE	EMAIL ADDRESS					
Brian Jackson	Chairman	01535 634503	bmjackson1@tiscali.co.uk					
Bill Ainsworth	Vice Chair	01282 614015	billscotroad@o2.co.uk					
John Zamorski	Hon. Sec	01200 427661	john@johnzamorski.wanadoo.co.uk					
Philip Ainsworth	Hon. Treas.	0771 3161480	philipainsworth@btconnect.com					
Caroline Coughlin	Honey Show Sec	07702 824920	caroline.coughlin@hotmail.co.uk					
David Rayner	Librarian	01200 426898	davidrayner1@yahoo.co.uk					
David Rayner	Education Officer	01200 426898	davidrayner1@yahoo.co.uk					
Pauline Roberts	Programme Sec.	01282 438615	paulpaulineroberts@talktalk.net					
Robert Bradshaw	Member	01254 261216	bob.bradshaw@sky.com					
David Bush	Member	01200 428152	david.bush2@talktalk.net					
Ron Dempster	Member	01282 699881	swicks580@btinternet.com					
Joe Wrigley	Member	01200 447621	no e-mail address					
Annette Hawkins	Member	01282 859745	nettie_hawkins71@yahoo.co.uk					
John Wilson	Member	01254 886120	john@wilson6457.freeserve.co.uk					
Karen Ramsbottom	Member	01254722513	john.rammy@ntlworld.com					
Victoria Winstanley	Member	01282701692	vicicoaffee@yahoo.co.uk					
Michael Birt	Web Master/Beetalk Editor		birt_192@hotmail.com					
DELEGATES TO T	HE CENTRAL COUN	<u>CIL</u>	-					
John Zamorski	Hon. Sec	01200 427661	john@johnzamorski.wanadoo.co.uk					
Philip Ainsworth	Hon. Treas.	0771 3161480	email philipainsworth@btconnect.com					

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

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 discretion 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 2009

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 4th 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 MEETINGS DATE TIME **VENUE** ORGANISER/CONTACT Reminder to all committee members. Meetings marked * are also committee meetings which will start one hour before the main meeting. 17/1/2010 2pm to 4pm West Bradford Village Hall BB7 4TE John Zamorski 01200-427661 Candle Workshop with John Zamorski 21/2/2010 2pm to 4pm West Bradford Village Hall BB7 4TE Bill Ainsworth 01282-614085 Top Bar and Long Hives with Bill Ainsworth 17/3/2010 Hill Crest Tea Rooms BB7 9PO. John Zamorski 01200-427661 7pm Annual Dinner Contact John Zamorski to arrange a booking etc

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

Minutes of Committee Meeting 4th November 2009 Held at Hodge House 7.00 PM

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

Apologies:- C. Coughlin

- 1. The details of the AGM were discussed. It was decided to cater for 60 People for pie and peas. The hall would be opened at 1.00pm to help to Deal with payment of subs etc. W. Ainsworth would organise the brew.
- 2. There was some discussion on the members pack. P. Ainsworth was to contact Martin Smith to follow up.
- 3. The accounts for the year were presented by P. Ainsworth. The Gift Aid payment had not been received at this time and P. Ainsworth explained the reasons for slight differences in some of the entries. These would resolve themselves in next year's accounts
- 4. It was decided to scrap the category of associate member because the branch no longer sends out "Beetalk".
- 5. The provisional programme for 2010 was presented by P. Roberts and this was discussed in detail. Some amendments were made and some follow up was to be done by W. Ainsworth, P. Roberts and J. Zamorski. It was decided to look for a quality speaker and perhaps invite other branches to attend to help cover costs. It was emphasised that where possible, hives would be opened at meetings so veils should be brought
- 6. The pocket sized card for next years programme was discussed to ensure that contact details and post codes were available.
- 7. The dates for the committee meetings 2010 were agreed as,17th January 18th April, 20th June and 15th August. These would start at 1.00pm. There would also be a meeting in the evening in the two week period prior to the AGM.
- 8. There being no further business the meeting closed at 9.00pm.

Secretaries Report 2009

2009 has been yet another strange year for beekeeping in Lancashire. Reports of slow colony build up, then good honey flows when along comes July and it was so wet there were colonies close to starvation in some areas. I know I had two fairly full supers on my productive colonies at the beginning of July and they were nearly empty at the end of the month. There were also late swarms. I was called out to one the day before I went on holiday at the end of August. In the wild this would have had no chance of winter survival but I was able to unite it with another colony. The late mild spell in October may also have made the bees eat their stores. The bees will have been active and out gathering water and pollen from ivy etc but very little nectar so honey would have to be eaten. I opened a couple of my colonies on 31st October and the queens were both still laying. All my colonies have plenty of stores to see them through but I will be keeping an eye on them. If you are unsure, it is a bit late to be feeding but round Christmas you can give them some fondant if needed. A good time to check is when you give them the oxalic acid treatment on a nice cold day in December. After you have treated and put the crown board back on just give the hive a lift to check the weight. If you are unsure what the weight should be and are worried it may not be enough, give me a ring. Meetings this year have been very well attended. We have seen a large increase in membership so David has been very busy with beginners classes and has also got bookings for next year. My phone has been working overtime with all the enquiries about starting and also from some of you wanting help with your new colony. Please feel free to ring me if you have any problems. Usually most things can be sorted on the telephone but if not then either I can come and have a look or I can organise someone closer to visit. Your committee is there to support you should you need it.

Now that we no longer have our magazine, Beetalk, delivered to us it is important that everyone regularly checks the website for updates and any other information at www.blackburnbeekeepers.com.

I would like to finish by saying a big thank you to all the lovely people who have opened up their homes to us throughout the year and to those people who work hard behind the scenes. Let's hope for a good year next year. John

<u>Minutes of the Annual General Meeting 15 th November 2009</u> <u>Held at Colne Masonic Hall 2.00pm</u>

- 1. Apologies for absence were received from C. Coughlin and P. Roberts.
- 2. The minutes of the 2008 AGM were passed as correct. Proposed by D.Rayner seconded by A. Hawkins.
- 3. There were no matters arising from these minutes.
- 4. The Chairman, Mr. B. Jackson read his report and thanked the Committee for the support they had given throughout the year.
- 5. The Secretary, Mr. J. Zamorski gave his report for the year and reminded everyone that they must make sure that they keep up to date with updates by checking the club website regularly.
- 6. The Treasurer Mr. P.Ainsworth gave his report which showed that we had a healthy bank account. He reminded everyone of the importance of paying subscriptions by 31st December to maintain full cover for 2010.
- 7. It was decided by the committee that subscriptions for 2010 would remain at £18. This was passed unanimously by the membership present.
- 8. The elections of the officers and committee for 2009 took place. These were as follows:-

Chairman Mr B. Jackson Vice Chairman Mr W Ainsworth Secretary Mr J Zamorski Treasurer Mr P Ainsworth Education/Librarian Mr D Rayner Honey Show Secretary Ms C Coughlin Programme Secretary Mrs P Roberts Webmaster Mr M Birt

Committee Members: - R.Bradshaw, D.Bush, R.Dempster, A. Hawkins, K. Ramsbottom, J. Wilson, V. Winstanley and J. Wrigley.

There being no further business the meeting closed at 2.40pm.

WHAT'S IN THE HONEY POT?



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

Editorial December 2009

Well everyone, How did it go for you this season. Reports say not to good again, and this is the third season on a trot when we have had great starts to the year and then very bad July and August when the bees had to eat all they had collected early on in the season. To top all this off the wasps have had a great year and caused havoc to some of us. Some of our members have done better than others and it could be to the fact that where they keep there hives are in better foraging areas than other members or they have moved them to areas where there was more for them such as the rape and heather. Also this bad weather as hampered the mating flight of any virgin queens. So all in all not a very good year. I think a good idea is for the committee to look into a program of getting records from our members to see how their bees went on, How many swarms they had, if they had to feed their bees, if they had to re-queen and so on, so that over the years some kind of a pattern could be established, but that is up to them to decide.

All the meetings over the year have been well attended and that is a great thing to happen as there is alot of work that goes on behind the scenes and its very rewarding to all who organise the meeting, venues and speakers to see a full house on the day.

Since your last Beetalk we have had the annual BBQ and our Honey Show and the AGM, reports are for further reading below. All were well attended and the honey show was a great day out. It was also great to see quite a few of our new members having a go at the show, so next year keep up the good work and maybe we shall see some new faces up in lights.

I have been thinking of starting up the "Portrait of a Beekeeper" articles, which Bill and Arthur the past editors of Beetalk used to include a few years ago and it would be great if any of you who would like an article about yourself would write into me via the website with a picture of yourself and a bit of a write up on how you got into beekeeping. Let me know and I will sort it all out.

One of our very experienced members Bob Fulton is having a few meetings at is home on some Sundays. They are of a practical nature with no exams and courses to do, and are only for new beekeepers. Its a more or less hands one type of meeting and are really interesting. Anyone who would like information can contact Bob on 01254772780 but remember they are only for beginners. It would be great if any other experienced member would follow the example of Bob and start to do the same in other areas. It only takes a little of your time but gives the beginners lots of practical tips that it would take ages for them to pick up if they were left on there own. Again this is something for maybe the committee to have a talk about.

I have been reading about experiments in the USA apparently showing that dusting with icing sugar has no effect on varroa populations. When I have tried dusting, it has increased the knock down rate and helped keep the numbers of varroa down. I had a look at the original report and found that the scientists in USA had a completely different technique of applying the sugar. They applied it rather like oxalic acid by dropping it between the frames. I remove the frame and apply the sugar all over the frames and that's why it works for me. Dusting will never completely get rid of varroa as it only affects those mites on the adult bees. It will have no effect on the mites on the brood. It just shows that the devil is in the detail.

Also on behalf of us all I would like to congratulate David and Angela Barrett on the arrival of their new grandson William. Lets hope he becomes as good a beekeeper as is Grandad and Grandma

By the time you read this editorial I will be back to the warmth of Thailand and most probably be sunbathing somewhere on a beach but will see you all in the spring when I hope things will just be getting going and that the year turns out to be a good one and that all you new beekeepers get a little to grips with this lovely hobby called Beekeeping. In the meantime I hope you all have a lovely Christmas and all our very best wishes to you all for the coming year

Michael and Saipin

December to March

Things that you should be doing with your bees

December, January and February

Now is the time that all the feeding that had to be done in August, September and October should all now have been completed as by now the bees will have clustered and will not be able to take any more food.

Any treatment for Varroa should have been done, the treatment with Apiguard or some other Thymol treatment should have been carried out in August and the treatment of Oxalic Acid no later that the end of December/early January.

All your surplus equipment should be stored away outsde in a cold, sheltered a place as you can. The cold will keep out any disease to a certain extent and the dryness will keep out any moulds and bacteria from getting at the frames etc. Also Acetic Acid can be used for treating brood combs that are suspect of containing disease. It can also be used to put under the brood boxes and supers but this is a very expensive way and there are other, alot cheaper ways.

Any repairs to equipment, replacing any damaged equipment, replacing new foundation is best done at this time as it gives you something to do but most importantly it is surprising how quickly spring is upon you and many a beekeepers as been caught with there pants down with not having stuff ready when its needed.

Beginners get reading up on what you think you are not to well up on and if the club or any experienced beekeepers are doing any courses or helping out get along and get their advice as in the busy season it may not be that easy as like us all they have their own hives to take care of and maybe, be mentors to a few other novices.

So in a way its a quieter time but like I say above, not a time to sit on your laurels and wait to things to start. as many a beekeepers as been caught on the hop and have been left with a shortage of equipment when its most needed.

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

Christmas Messages

From our Chairman.

Christmas is once again upon us when we look forward to a pleasant and enjoyable few days away from the normal routine of day to day goings on.

May I take this opportunity to wish you all the very best of health for the coming year and the hope that the weather and your bees can work together just like it says in the books and they remain healthy to bring you the success at our Honey Show.

So once again a very Happy Christmas and New Year to you all.

Brian and Margaret

From our Treasurer and Honey Show Secretary

To the members and families of the Blackburn Branch can I wish you all a very Merry Christmas and best wishes for 2010. Please remember that your 2010 Subscriptions are needed by 31st December, and lets all put in a New Year wish for a good 2010 to be a great beekeeping year, with plenty of rewards for all our hard work both as a club and as beekeepers.

Cheers Phil and Caroline

The Secretary Speaks

I am writing this to you on the evening of 15th November 2009 having just returned from the AGM. Lovely pie and peas and a good turnout. I think it was 56 but it may have only been 55 because people kept moving as I was trying to count. Can I please remind everyone to book with me when we have events concerning food like the AGM and the BBQ. I need to know numbers so that we don't let anyone down. It was good to see so many of you and I thought the atmosphere was pleasant. We have elected two new members on the Committee, Karen Ramsbottom and Vicky Winstanley. I am very pleased they stepped forward to have a go because we need some new blood and new ideas. As beginners they will be able to say what they think is needed for them and we can hopefully keep the interest up for the new members. For the rest of you out there who want to have your say then why not write an article for our web page and forward it to Michael. No bad language or slander please, well you can if you want but it will be censored although we will take note of what you say. On that point once again keep checking the site for updates. I would like to finish by saying that Lynne and I wish you all the very best for Christmas and let's hope 2010 is a better Beekeeping year

John and Lynn

And finally

On behalf of us all. I would like to thank everyone who have helped to make our association what it is today. Firstly to all the members who have kindly opened their homes to our meetings and made us all welcome, and to our speakers for giving us some jolly good topics. To Pauline who as worked so hard to get the program set up and to arrange all the venues and speakers. To Caroline who is taking the honey show from strength to strength and to Arthur for the excellent judge he always is. To John who works so hard behind the scenes and does so much for us all. To our mentors who are trying their best to get our new members going and finally to all the members who have turned up to our meetings. I am writing this message out in the garden where the sun is blasting down on me at about 30c and its just the start of the winter season. We will most probably have Christmas dinner on the beach where we will be thinking of you all. So a very happy Christmas to you all wherever you are and all the best wishes in the world for the coming New Year. May the winter be cold and kind to the bees and the New Year be blessed for a great season ahead.

Branch News

Annual Bar-Bee-Que 20th September 2009

We had 30 people for the annual cremation of burgers and sausages by me. Brian Jackson said I must be getting better because he couldn't find any burnt ones. There was a wonderful selection of puddings on offer made by Angela Moyle.

I usually never get to sample them because I am busy setting fire to everything but this year Lynne was under orders to plate me some up. Good job she did because loads of people were going in for seconds and I suspect Brian sneaked a third. It was also Ron Dempster's birthday so we were able to give him a cheer. Bill says he isn't wearing well.

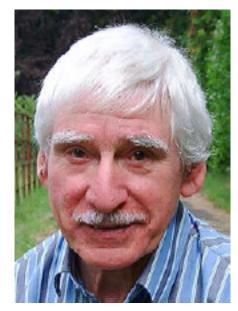
The weather was really kind to us yet again and we weren't plagued by wasps. Probably all the smoke I had created. Lots of people commented on the beans Lynne had made. They are called Gigantes (pronounced Yegantes) and we bring them back from Greece in half kilo packets (dried). If anyone wants the recipe please get in touch and you can have it. I would think it will work just as well with other dried beans.

The only thing that spoiled my day was that I didn't win a prize in the raffle. I think the chef should get one free. Ha-Ha I'd like to see Bill letting me get away with that. Thanks must go to Angela and Rob Moyle for allowing us to use their lovely home for this meeting. Thanks to David and Angela Bush for running the Raffle (where's my prize?) and thanks to Lynne for peeling all the onions and making the beans. Roll on next year.

Thanks John Zamorski







ASK BOB!

All of us get stuck at some time or another and need a bit of information or advice about our bees or beekeeping inGeneral. Bob Fulton who is a very experienced beekeeper is more than willing to help you in any way he can.

Give him ring; go and see him at his apiary.

Bob ordered twelve new Black Queens for 2009 and says he is happy for anyone to take their new virgin queens (In nucs) to his apiary for mating.

Bob lives at The Mound, Pole Lane, Darwen, Blackburn BB3 3LD and you can contact him by phone on 01254 772780

Some pictures of a meeting at Bobs Place. Bob is showing a few members how to make Mead. Everyone went home happy.





Report of the Honey Show for 2009

The 2009 Annual Branch Honey Show took place at Samlesbury War Memorial Hall in Samlesbury, on Sunday 4th October.

The Judge was Mr. Arthur Gillett from Liverpool, who was delighted at the overall number of exhibits.

There were 91 exhibits from 19 entrants, and over 70 people attended, the show and watched the informative DVD "An Introduction to Beekeeping", which was followed by a quiz by our Education Officer Dave Rayner. There were also a selection of stalls where beekeeping accessories, equipment, and chemicals could be purchased, along with educational displays and stalls including the association library.

The winners of each class were as follows: -

Class	1	Light Honey	David Barrett
	2	Medium Honey	John Zamorski
	3	Dark Honey	No Entries
	4	Ling Heather Honey	No Entries
	5	Naturally Crystallised Honey	David Barrett
	6	Soft Set Honey	No Entries
	7	2009 Honey	John Zamorski
	8	Novice Class	Tony Houghton
	9	"Blacked Out" Jar (Best Taste)	John Zamorski
	10	Frame of Honey Comb	Phil Ainsworth
	11	Beeswax Cake	John Zamorski
	12	Beeswax Candle	John Zamorski
	13	Wax Craft Exhibit	Brian Jackson
	14	Mead	John Zamorski
	15	Honey Fruit Cake	Laurie Ball
	16	Honey Fudge	Betty Hoyle
	17	Honey Desert	Jane Bamford
	18	Photographic Print	John Zamorski

The Ken Preedy Memorial Cup for the "Best Exhibit in Show" was for the Bees Wax Cake exhibited by John Zamorski.

The Challenge Cup was also awarded to John Zamorski for the "Most Points in the Show". Besides the seven classes he won, John came 2nd & 3rd in a number of other classes.

The Ken Gaiger Memorial Trophy for the "Most Improved Beekeeper" was awarded to Fred Duckett.

The Ken Gaiger Education Shield for the "Best Results in the Basic Beekeeping Examination" went to Ron Dempster.

A Special **Junior Beekeeper Trophy** was awarded to William Tracey who successfully completed the Junior Beekeeping Examination.

Congratulations to all of the winners, and thankyou to all the exhibitors for the time and commitment put into showing as the Branch Honey Show would not be possible without your continued support.

Special thanks to Phil Ainsworth for helping to set up the rooms and tidying up after we had finished using the facilities at Samlesbury War Memorial Hall.

Thanks must also go to Lynne Zamorski and Margaret Jackson, who prepared and served the refreshments which were available throughout the afternoon.

Once again, congratulations go to all of the successful prize winners.

Caroline Coughlin Honey Show Secretary

Some pictures from the Honey Show







































Success from a Nucleus start

Hardly a summer to have experienced the joys of bee-keeping I feel, especially for our new members – although, the 'old hands' won't be overjoyed I'm fairly sure - this being the third consecutive summer where the weather hasn't favoured our craft. My thoughts however, just now, are very much with our beginners and wondering how they might make a start. This could have been mentioned during the Beginners' Days in April and May, such as:

a A full size colony – a bit formidable that, perhaps.

b A swarm maybe.

c A nucleus.

Well, to help refresh my memory as it were, I bought a nucleus – yes I did – no need for plaudits, to work out how it might compare with the two other possibles.

In detail then, I collected a five-frame nucleus from Michael Collier on 28th May – quite early for a nucleus headed by a current year's home-bred queen. It looked excellent, considerably exceeding the laid down standard for a five-framed nucleus. There were large slabs of sealed brood in all frames, thickly covered with bees and, ready for moving into a full sized brood box. This I did the next day, at the same time adding two frames of foundation then closing-up with a dummy board.

Now it is a good plan to add a feeder of syrup to encourage the drawing-out of foundation in cases such as this, but if you recall, we enjoyed our best bit of summer round about this time and for the next fortnight or so, therefore I didn't feed. Being so strong and with a good nectar flow they drew out these two fresh foundations in three days when I added three more foundations, which, likewise were rapidly drawn and in the main, filled with nectar - not much comb in which the queen could lay - it was quite exceptional. To provide room for the queen then, I added a super of drawn newly extracted comb which was swiftly occupied and in what seemed no time at all, she had laid up in about eight of these frames, had gone down and was laying in the newly vacated cells there. I then added a super of foundation over a QE and to my amazement this was quickly drawn out and filled. I suspect much of this came from those five frames in the deep box added as foundation after installing the nucleus there at the end of May. This super was sealed and extracted towards the end of June and returned the evening after extraction. On St Swithins' Day (ever the optimist), I added a box of newly extracted, wet, deep frames - how did I come by these? Well, about four fields away there was a field of Spring sown OSR which finished flowering on about the 12th July and as I'd got a box or two on other hives ready to extract, I felt certain there would be OSR honey in the mix and feared granulation would take place if I delayed – there was a hint of granulation here and there - got it off just in time. In truth, I added this box for the bees to clean up intending to take it off and put it in store two or three days later but when I looked it was full of bees, so I left it until the 11th August no prized for guessing - yes, it was full of honey, nine of the frames capped, the other two partially so. Summarising then. In seventy days it, the nucleus, built up into a full sized colony (brood-and-a-half). I didn't reinforce it with frames of brood from another colony. It didn't swarm (wouldn't expect a current year's queen to do so but ...), no supersedure – I know this because the queen was marked green as she was when I bought the nucleus. Added to this, the pleasure – that important component of our craft – of watching/helping a five frame nucleus, bought at the end of May, build up into a strong colony to go into winter. Finally the cost of the nucleus seemed a bit alarming but, I now have a 'real' hive of bees and a crop of honey, if priced at only £3 per lb, easily offsets the cost of the nucleus – in fact it would do so twofold.

"Stop!!" I yell.

A screech of brakes, the honk of an irate driver and I'm jumping up and down at the side of the road pointing. "Ooh Ooh! Look, bees up a tree!!" I don't think my Dad has seen me so excited since I was small. Standing towering above the palms is a Kayu Rajah (Wood Royal) or Royal Tree, one of the tallest trees of the Borneo forest growing up to 200 feet, and often left standing like beacons among the oil palm trees of a plantation. One of the reasons being because they attract the bees and harbour the combs hanging down from the branches well up above predators and ants. Now this is where our UK beekeeping is made to look like child's play. The harvesting of honey from such lofty colonies involves scaling up the trunk aided by wooden pegs, often at night and with very



minimal protection. The comb is then lowered in rattan baskets. A Health and Safety rep's nightmare.

It wasn't possible to get very close (steep drop, a stream, possibly with wriggly things in and inexperience in shinning up tall trees. Pooh Bear attached to the string of a big blue balloon suddenly made sense!) This was however one of the highlights of a recent visit to my Dad in Sabah Malaysia (North Borneo) with my eldest daughter. However she was rather less impressed that her Mother had travelled half way round the world and had brought her beekeeping anorak with her! I've only been back a few days so haven't visited my own girls yet to tell them about their Malaysian cousins. Perhaps better not though. Don't want them getting any challenging ideas.

Just a quick one to say that these bees are Apis Dorsata and not the same as our Europeam Bees Apis Melliferra and cannot in anyway shape of form be hived

Michael

My Dad, William Tully, went to Writtle Agricultural College 1949-51 but, as you can see from this photo, his protective gear was limited in those days and he gave up because of the stings! Aly El Just.

With thanks to Ludlow and District Beekeepers Association.



Frames & Frame-spacing

Many beekeepers, especially novices, find the range of frame-types and the various methods used for spacing frames confusing. Thorne's catalogue lists 6 top bars, 19 side bars and 9 bottom bars. Admittedly, these are not all for the same type of hive, but how do you decide which type of frame to use in the brood box and super, and how should you ensure that they are correctly spaced?

Frames

If you keep bees in Langstroth, Modified Dadant, Commercial or 14x12 hives, the decision is easy as these hives all use self-spacing (known as 'Hoffman' after their inventor) frames in the brood chamber and do not have a choice of top bars. Hoffman frames have side-bars with broad 'shoulders' which provide fixed spacing between each frame. The only option is the choice of bottom bar(s) - which can be either two-piece for use with wired foundation, or one piece if you want to wire the frame itself. Based on my experience of supplying equipment for the past 8 years, very few Cheshire beekeepers use these hives, the vast majority opting for the Modified National or the WBC, both of which use the same frame types. There are two different top bar and two different side bar designs available for the Modified National brood chamber which in combination results in four different frame choices. The top bars are available in two different widths, S" or 17/16". The wider top bars are designed to reduce the bees' tendency to build brace comb. The side bars are either plain or Hoffman. The British Standard BS1300 identifies the four different types as follows:

DN1: S" top bar, plain S" side bars DN2: 17/16" top bar, plain S" side bars

DN4: S" top bar, Hoffman self spacing side bars $1\square$ " wide at the top DN5: 17/16" top bar, Hoffman self spacing side bars $1\square$ " wide at the top

As an further option, the bottom bar(s) can be either two pieces or one piece. The frames used in Smith hives are the same as those used in the Modified National/WBC except that the lugs are each shortened by 3/4" so that they fit the narrow rebate used in the Smith hive. When it comes to the frames for supers, there are even more choices. In addition to plain and Hoffman side-bars, super frames are also available wide parallel side bars known as Manley frames. These frames were developed by the commercial beekeeper R.O.B. Manley to prevent frames rocking in the supers and crushing bees whilst moving hives. Super frames for the Modified National and WBC are identified as SN1, SN2, SN4 and SN5 equivalent to the brood definitions above.

Frame Spacing

In feral colonies, bees space their combs at approximately $1 \square$ " (35mm) between the midrib of adjacent frames. This leaves a space between the comb faces of $\frac{1}{2}$ " (13mm) allowing the bees to work back to back between the combs. Within bee hives, a number of methods are used to achieve the same constant space between combs.

Hoffman brood frames have side bars designed to provide the required spacing of $1 \square$ although Modified Dadant brood frames are designed to space frames at $1\frac{1}{2}$ " (Does anyone know why?). Frames with plain side bars (DN1, DN2, SN1, SN2) are not self-spacing and so need to be used with separate spacers. Whilst brood frames need to be spaced by the standard $1\square$ " it is possible, with care to use wider spacing for the frames in supers. This wider spacing, up to 2" between frames, allows a reduction in the number of frames required to fill the super as well as providing an increase in the weight of honey which can be stored. There are also fewer frames to uncap when the time comes for honey extraction and the thicker combs are easier to uncap as the comb surface stands proud of the frame.

There are several ways that frames can be spaced:

Metal/Plastic Ends

Metal ends, which slide onto the lugs of National or WBC frame top bars were introduced by WBC in 1890. These are still available, but have largely been replaced with plastic equivalents. Plastic spacers have the advantage of being less likely to result in cut fingers. Spacers are available in two sizes, narrow to provide the standard spacing of 1□" or wide for use in supers where it is desired to space frames further apart (up to 2"). They are also available in a range of colours corresponding to the queen marking colours. Some beekeepers use coloured plastic ends to help identify the age of combs to assist with their comb replacement programme. Another technique is to use one colour of spacer on one end of the frames and a different colour on the other end to help ensure that frames are always replaced in the box the correct way round.

Frames & Frame-spacing continued

Castellated runners

These are fitted to the box, usually in place of the frame runners. They are available to suit spacing for 9, 10 or 11 frames in a National super. They can be used in brood boxes but in that case the appropriate castellation must be selected to maintain the standard spacing of $1 \square$ ".

Studs/screws

Some beekeepers use round head screws or studs (Brother Adam of Buckfast Abbey used hob nails) to space frames accurately. These methods are not widely used due to the labour involved in fitting the spacers but they do have the advantage of minimum contact-area between the frames, which reduces the use of propolis by the bees.

Yorkshire spacers

Metal spacers that fix onto the frame side bars. They are not commonly used these days, having been largely superseded by the more popular Hoffman frames.

Finger spacing

This relies on judgement using a finger at each end of the top bar and checking that the frames are equally spaced across the brood box. Not to be recommended as a method to be adopted as the norm, as it is not possible to achieve accurate and consistent spacing, but useful in an emergency if you run out of plastic ends or are unfortunate enough to have a mixture of plain and self spacing frame types in the box.

Comparison table

Each of the spacing methods available has advantages and disadvantages. There is no single ideal method which will suit everyone. The following table compares some of the advantages and disadvantages of each method.

Spacer type Advantages Disadvantages

Metal/plastic ends

Low cost. Can vary spacing in supers. Need to be removed from super frames when extracting.

Hoffman Self-spacing Frames more expensive Side-bars may not fit extractor. Castellated spacers Do not require plastic ends on frames

Available in a range of spacings Prevent frame movement during transport. Can have sharp edges Manley Prevent frame movement during transport. Cost. Bees propolise frames together.

Recommendation

You may have heard it said that if you ask two beekeepers the same question, you will probably get three different answers! I recommend that beginners should try to attend apiary meetings where they can see the different methods in use and then decide what they wish to use. For the record, having tried most of the frames and spacing methods described above over several years, I now use Hoffman frames in the brood boxes and plain frames with 10 slot castellated spacers in the supers.

Graham Royle

In order to prove what Graham says in his last paragraph, I feel bound to point readers towards an article in the Winter 2007 issue of this magazine, which explored this issue, and especially the stud method, which would be worth trying (in the brood box only) for everybody. It is cheaper than buying Hoffman frames, and the labour involved is little more than fixing metal/plastic ends. You would not return to any previously used method: I even knew one beekeeper who after trying this system, went through all his Hoffman frames cutting off all the shoulders! Ed.

With thanks to Cheshire Beekeepers

The new beehaus

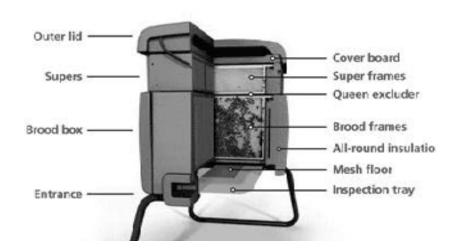
You may have seen on TV a new radical design of beehive called the 'beehaus'. Newspapers have described these new 'revolutionary' plastic hives and I am sure there has been some very clever marketing. More than 50% of adults under the age of 45 now use the internet whereas only about 2% go 'silver surfing' above the age of 65. I had a look on the web and there is plenty of interest on the beehaus from young beekeepers and 'wannabees' with dozens of beehaus sites on Google. Some of the old guard may be worried about these trendy-looking beehives encouraging people to take up beekeeping on a whim without any training or mentoring. The bees will either die, swarm uncontrollably or spread diseases. I know that some beekeepers in Europe swear by polystyrene hives but in the UK they were never popular. The beehaus publicity blurb suggests that anyone can become a beekeeper. I won't be surprised if many of them fail within a season or two and there may be some bargains on e-Bay. To me, it seems a lot of money but perhaps the urban yuppie may find this small beer if he/she is starting a new 'green' hobby. Personally, I think the best material for hives is wood, and preferably red cedar; some WBC hives are still doing sterling work after 50 years.

I'm still reserving judgement. So what do you think? What do the younger beekeepers think about plastic hives?

The beehaus. The beehaus is specially designed for keeping bees in your garden or rooftop. Developed to provide your bees with a safe, modern home in which to live it makes beekeeping straightforward and fun. The beehaus comes complete with everything your bees need. You can order a starter kit which includes a bee suit, hive tool, smoker, gloves and even some bees! Cover boards. These fit on top of the main body of the hive or on top of the supers. They act as individual lids so that you can close and open up sections of the hive. Clearer boards. These are used to clear bees from the supers when the honey is ready for harvesting. They can also be used to feed your bees extra supplies. Supers. Each super holds 5 national sized frames - enough to store approximately 7 kgs of honey. Frames. Every beehaus is shipped with 11 deep national brood frames (often called 14x12 frames) and 10 National super frames - including wax foundation sheets for all frames. Queen excluders. Stops the queen laying eggs in the honey supers. Hive divider. Converts your beehaus into two separate hives.

Honey jars. Still taking wine to dinner parties? Your own home made honey is much more exclusive. Beekeeping guide. A complete guide to keeping bees packed with useful advice. 30 day money back guarantee. If you are not entirely satisfied with your beehaus we offer a no quibble 30 day money back guarantee.

With Thanks to Chris Jackson Wiltshire Beekeepers Association



THE UNDER-RATED DRONE.

Drones are male bees. They take 24 days to develop from an unfertilised egg. They are raised in the spring and continue in the hive all summer. They live a life of idleness, waited on by their sisters. In the autumn they are unceremoniously turfed out of the hive to perish. Their only purpose in life is to mate with a virgin queen, whereupon they die, albeit in ecstasy. They are large, have big eyes, no sting and are allowed to enter any hive. This, in a nutshell, sums up the information about drones to be found in many bee books. Oh, and they are very useful for practising various procedures on, such as marking and clipping. The same books will have chapters to say about the multi-tasking workers and as much about the highly specialised queen; the poor old drones get a paragraph or two. But in their way they are just as important as the queen-after all they provide half of the workers genetic make up. Most drone information is to be found in more specialised books on anatomy, biology etc, and in reports of research carried out into mating behaviour. I have tried to put together from many sources a summary of all the relevant drone data I could find. It is fascinating!

THE NURSERY.

In very early spring the queen recommences laying after the winter break. Her eggs are parthenogenetic, ie they will hatch without first being fertilised. However, a fertilised egg can produce either a sterile female worker bee or, if fed correctly, a queen bee. Unfertilised eggs result only in male bees. Only worker eggs are laid at first. As the colony grows in strength, drone eggs will appear, some six to eight weeks before any swarming will occur. This ensures that there is an abundance of mature drones when the first virgin queens appear. This production of the male element before the female is called protandry, although the term is more usually used with reference to hermaphroditic species and plants. Drones are substantially larger than worker bees and need a bigger cell, both in width and length, to mature in. The workers build these cells mainly on the periphery of the brood nest - it is surmised that drone larvae prefer slightly cooler temperatures. Also, if there is a sudden cold snap, and the cluster has to contract, causing chilled brood, drones are more expendable than workers. In a crisis, the first to be ditched are the older drone larvae. Some say that the queen is shepherded to these cells when the workers 'think' it is time to start raising drones. It is believed that she measures the diameter of each cell with her forelegs and so knows whether to lay a fertilised or unfertilised egg The life cycle of the drone is well catalogued. As a larva, he needs substantially more food than a worker does, and there appear to be differences in the composition of this brood food, drone food having more diverse proteins. The older larva is also fed a food with a different ratio of carbohydrates, vitamins and minerals to that given to a young larva. When ready to pupate, his cell is capped with a domed cover, giving him even more room. He takes twenty four days to mature before hatching, compared to the twenty-one needed by workers. (It is this extra three days pupation that makes drone brood so attractive to varroa mites-they can usually produce another generation in that time.)

JACK THE LAD.

Once hatched, our drone then does no work in the hive, having no specialised parts to perform any tasks in the hive, although his furry body must help with temperature control. He is fed by his sisters at first, on a mixture of brood food, pollen and honey. Sperm production does not seem to be affected by the amount of protein given, though longevity and mating ability may be. An older drone will then help himself from open honey cells, to power his mating and orientation flights. (A resting drone requires 1-3 mg sugar per hour, a flying drone needs 14mg/hr, rather more than a worker.) Once he is old enough to fly he will take orientation flights, but cannot do any foraging, as his tongue is short and he has only a slender honey stomach and no pollen baskets. You are not likely to find a drone sitting on a flower! Although he can make an intimidating buzz when aroused, the drone has no sting and cannot defend the hive. Virtually all the glands and external adaptations of the worker bee are absent or vestigal in the drone. However, his specialised parts needed to perform his prime function of mating, are highly developed. His eyes have 7-8000 facets, compared to the 4-7000 of the worker. His sense of smell is greatly enhanced by the 30,000 antennal plate organs, carrying odour and other receptors. (worker bee has 3000). He has very strong wing and abdominal muscles and impressive reproductive organs.

HAPLOID/ DIPLOID

Queens can lay fertilised or unfertilised eggs. Fertilised eggs contain two sets of chromosomes, one from the queen and one from the drone whose sperm fertilises the egg. These eggs are called diploid and hatch into females. Only their subsequent nutrition determines whether they become workers or queens. Unfertilised eggs have only one set of chromosomes, from the queen, and are called haploid. These eggs hatch into perfect males, or drones. A drone has no father, but he does have a grandfather.

Occasionally a queen may lay a fertilised egg in a worker cell, which has the potential to hatch into a male with two sets of chromosomes, called a diploid drone. These larvae are

THE UNDER-RATED DRONE CONTINUED

invariably eaten by the workers, but if raised artificially the adults have been shown to have small testes and little semen, rendering them sterile. It used to be thought that the diploid drone larvae emitted a particular pheromone that induced the workers to destroy them. It was called the cannibalism pheromone. (Woyke, 1963) More recent research (Journal of Apicultural Research, 2004) has shown that the cuticular substances of diploid drone larvae contain the same elements as diploid worker and haploid drone larvae, but in a different proportion to either of these. Queens can lay fertilised or unfertilised eggs. Fertilised eggs contain two sets of chromosomes, one from the queen and one from the drone whose sperm fertilises the egg. These eggs are called diploid and hatch into females. Only their subsequent nutrition determines whether they become workers or queens. Unfertilised eggs have only one set of chromosomes, from the queen, and are called haploid. These eggs hatch into perfect males, or drones. A drone has no father, but he does have a grandfather. Occasionally a queen may lay a fertilised egg in a worker cell, which has the potential to hatch into a male with two sets of chromosomes, called a diploid drone. These larvae are invariably eaten by the workers, but if raised artificially the adults have been shown to have small testes and little semen, rendering them sterile. It used to be thought that the diploid drone larvae emitted a particular pheromone that induced the workers to destroy them. It was called the cannibalism pheromone. (Woyke, 1963)

More recent research (Journal of Apicultural Research, 2004) has shown that the cuticular substances of diploid drone larvae contain the same elements as diploid worker and haploid drone larvae, but in a different proportion to either of these. Presumably the nurse bees recognise this composition as wrong and remove the larvae, thus preventing the investment of much time and resources in rearing worthless drones. (It is also possible for unfertilised eggs laid by workers to develop into queens. This is common in Apis mellifera capensis.) The laying of diploid drones seems to be more common if inbreeding has taken place i.e. the queen has mated with a closely related male(s). A sibling mated queen can produce up to 50% diploid drones. (Woyke) It can be so prevalent that many cells lie empty, causing a pepper- pot appearance on

THE MAN-ABOUT-TOWN.

A drone takes about a fortnight from hatching to become sexually mature. From then, in an average life of four weeks (Winston), he will fly out every day, usually in the afternoon, between 2.00pm and 6.00pm, when it is warm enough, at least 16 C, and preferably much warmer. He flies to a gathering of drones in the sky, known as a 'drone congregation area' (see below), there to await the arrival of virgin queens. If 'lucky', he will mate with a virgin, dying as a result. If unlucky in love, he will return to his own, or a different colony, where he will be easily accepted. In an apiary of several hives you can test this by marking some drones and seeing where they turn up. They definitely seem to prefer hives with plenty of food or virgin queens in them. (It is quite rare to find drones in small observation hives) A hive with a virgin queen in it acts like a magnet to drones-even a small nuc may have a whole frame of them. Once the queen has mated they mostly vanish. Presumably this must, in pre-varroa days, have happened in the wild, even though colonies would have been much more widely separated than in domestic apiaries. It ensures that genetically diverse drones are on the spot when a virgin leaves to mate

DRONE CONGREGATION AREAS

July 1, 1792

the comb.

'There is a natural occurrence to be met with upon the highest part of our down on hot summer days, which always amuses me much, without giving me any satisfaction with respect to the cause of it; & that is a loud audible humming of bees in the air, tho' not one insect is to be seen. This sound is to be heard distinctly the whole common through, from the Moneydells, to Mr White's avenue-gate. Any person would suppose that a large swarm of bees was in motion, & playing about over his head. This noise was heard last week on June 28th.' Gilbert White, 'A Natural History of Selborne' The above writing is believed to be the earliest known reference to what we now call a drone congregation area. (DCA) Although a lot of research has been carried out into drone behaviour in DCAs, no one has yet satisfactorily explained why the DCAs occur in certain places, and even more mystifying, why they persist in the same places year after year. (The DCA referred to by Gilbert White is still in use today.) Virtually all drones die in the previous autumn, so how do the new drones know where to go?

THE UNDER-RATED DRONE CONTINUED

Light distribution and the contour of the horizon seem to play a part in choosing a site (Pechhacker 1994) and Zmarlicki and Morse determined that most DCAs seem to be located over an open area of land of about a hectare, protected from strong winds. Obstructions such as high buildings and tall trees are avoided, but not all open spaces are used. The flyways connecting the DCAs tend to follow lines of trees or hedges, etc. There may be several DCAs adjacent to each other. One study showed that a 10 sq k. area next to an commercial apiary contained at least 26 DCAs and 18km of flyways. Based on radar images a DCA was defined as an area approx. 100m in diameter, where the drones fly at a mean height of 25m-it depends on wind velocity. The stronger the wind, the lower the drones fly. Many drones seem to stay faithful to one DCA, but may visit another in the same general direction. Two to three km seems to be an average distance for a drone to fly, but they have been known to travel up to six km. For a queen rearer wanting pure matings from a mating apiary, it seems that this is the minimum distance there must be from any other hives, or else a physical barrier of 500m or more must be present. The parentage of a sample of drones was tested in Germany in 1998, and the conclusion reached was that all the colonies in the area seemed to send roughly the same proportion of delegates to the meeting, thus minimising the chances of inbreeding. (C.Collinson, Bee Culture, Sep. 2008) Because mating takes place in flight, it is difficult to observe. Modern technology such as radar, combined with the technique of tethering a virgin queen to a moving line, has shown drones detecting a virgin forming a long comet- shaped tail behind her. Recent studies have shown that the drones find the virgin primarily by smell. One of the components of queen substance, called 9-ODA, attracts drones during mating flights. (Apis UK, July 2008). However, it has also been noticed that drones will momentarily chase anything that moves, butterflies, dragonflies or a thrown stone, so presumably eyesight plays a part as well. Drones have to be very fit and well deve oped to mate with a queen. In addition to the excellent flying power needed to catch the queen, they must have ample supplies of spermatazoa, as only a fraction of each ejaculate will migrate to the queen's spermatheca. (Woyke and Jasinski, 1973) In a series of studies made by Duay et al, in 2002, it was shown that the effects of parasitism by Varroa destructor in the larval stage, could seriously affect the drones ability to mate. A significant reduction in drone body weight resulted from invasion by only one female varroa mite, and two or more mites reduced drone life expectancy so much that sexual maturity was seldom reached. Varroa parasitism by only one mite hardly affected flying power but sperm production was reduced by 24%. In those drones that survived, two female mites invasion resulted in greatly reduced flying power and a sperm reduction of 45%. Other interesting facts to emerge are

- (a) Drones like it hot. Flying to a DCA and gathering enough drones to form a comet only occurs at 18C or above.
- (b) They are very good time keepers, generally flying between 2.00pm and 6.00pm This varies according to the weather.
- (c) Drones returning to the apiary outside these times were not interested in a queen.
- (d) Maximum flight height in flyways is 21m, but in DCAs it can reach 50m.
- (e) Drones can make several trips to a DCA in an afternoon, returning to the hive to refuel when necessary. Each mating flight lasts about 30 mins.
- (f) The number of drones in a DCA can vary enormously, from hundreds to thousands.
- (g) Usually, 7 to 11 drones will mate with a queen. About 90 million sperm will be deposited in her oviducts, and a mixture of about 7 million of them will be stored in her spermatheca

MATING

The actual process of mating has now been documented quite thoroughly.

A drone mounts a queen and inserts his endophallus and ejaculates his semen. During ejaculation he falls backwards and his endophallus is torn from his body, remaining in the queen.

Any subsequent males mating with the queen dislodge the previous drones endophallus and leave their own in its place. The drones die quickly with their abdomens ruptured in this fashion. The queen returns to her hive still carrying the endophallus of the last male to mate with her. Beekeepers call this the 'mating sign' It will be removed by the nurse bees.

The process is described very clearly in 'The Biology of the Honeybee' by Mark Winston.

THE UNDER-RATED DRONE CONTINUED

The Down-and-Out.

Once the mating season is over, the 'raison d'etre' of the drones is gone. Only in queenless or very well provisioned colonies will some be allowed to overwinter in the hive. There is no sentimentality in nature, and drones with no function to perform are simply a drain on valuable resources, ie honey stores. In the autumn they are refused entry to the hive, or have their wings bitten and are forcibly ejected, to die of cold and starvation.

BIBLIOGRPHY

Hope you enjoy.

- 'Bees, Biology and Management' by Peter G. Kevan.
- 'The Biology of the Honeybee' by Mark L. Winston.
- 'Anatomy and Dissection of the Honeybee' by H. A.Dade.
- 'Bee Genetics and Breeding' edited by Thomas Rinderer
- 'Drone Congregation Areas' by C. Collison. (Bee Culture, Sep 2008)
- 'Beekeeping' by Kim Flottum.
- 'Pheromones of the Social bees' by John Free.
- 'The Honey Bees of the British Isles' by Beowolf Cooper.

With thanks to Judith Rowbottom of Harrogate and Ripon Beekeepers Association and of course e-bees

I thought I would include this article which is rather long but great reading as lots of us seem only to talk about The Queen and the Workers and seem to pass the important roll the drones have to play. After reading the above article I hope we will gain a little more understanding of how important the drones are to the wellbeing of a healthy hive.

Michael.		

<u>Honey Bees Launch Attack on Varroa Mites</u> Research published in the Journal of Apicultural Research and Bee World

Honey bees are now fighting back aggressively against Varroa mites, thanks to Agricultural Research Service's (ARS) efforts to develop bees with a genetic trait that allows them to more easily find the mites and toss them out of the broodnest. The parasitic Varroa mite attacks the honey bee, Apis mellifera L. by feeding on its hemolymph, which is the combination of blood and fluid inside a bee. Colonies can be weakened or killed, depending on the severity of the infestation. Most colonies eventually die from varroa infestation if left untreated. Varroa-sensitive hygiene (VSH) is a genetic trait of the honey bee that allows it to remove mite-infested pupae from the capped brood-developing bees that are sealed inside cells of the comb with a protective layer of wax. The mites are sometimes difficult for the bees to locate, since they attack the bee brood while these developing bees are inside the capped cells. ARS scientists at the agency's Honey Bee Breeding, Genetics and Physiology Research Unit in Baton Rouge, La., have developed honey bees with high expression of the VSH trait. Honey bees are naturally hygienic, and they often remove diseased brood from their nests. VSH is a specific form of nest cleaning focused on removing varroa-infested pupae. The VSH honey bees are quite aggressive in their pursuit of the mites.

The bees gang up, chew and cut through the cap, lift out the infected brood and their mites, and discard them from the broodnest. See this activity on video at: www.ars.usda.gov/is/br/bees/index.htm This hygiene kills the frail mite offspring which greatly reduces the lifetime reproductive output of the mother mite. The mother mite may survive the ordeal and try to reproduce in brood again, only to undergo similar treatment by the bees. To test the varroa resistance of VSH bees, the Baton Rouge team conducted field trials using 40 colonies with varying levels of VSH. Mite population growth was significantly lower in VSH and hybrid colonies than in bee colonies without VSH. Hybrid colonies had half the VSH genes normally found in pure VSH bees, but they still retained significant varroa resistance. Simpler ways for bee breeders to measure VSH behavior in colonies were also developed in this study.

<u>Feeding Colonies ready for winter an extract taken from the Apiarist courtesy of Harrogate and Ripon BKA</u> and BEES.

The following extract was taken from an excellent article that deals with feeding for the winter but obviously starts in September. As time has moved on I have extracted that portion that deals with the risks that colonies face from the turn of the year.

Unless the Winter is particularly mild, resulting in overactive bees, they will not use a great deal of their stores until they start rearing brood from February onwards. This is when the danger of starvation is greatest, and from this time on it is worth checking colony weights to identify any that may be running low on stores.

Sugar syrup should not be used until the bees are flying freely- it is not a suitable feed in winter when the bees are clustered. It is said to excite them too much and cause dysentery.

They will certainly not be able to go up into a Rapid or Miller type feeder when it is cold.

Any such colonies can be maintained by the use of Fondant, a stiff soft sugar mix.

A Kg (2½ Lb) block placed under the roof and over a feed hole in the crown board can be applied without disturbing the colony.

Fondant is very sticky, and some protective cover is valuable to prevent sticky fingers in application. A cling film cover over the top is easy to use, and with this it is easy to see how much of the fondant the bees have used.

One downside is that the bees may attempt to remove the used cling film out through the hive entrance! The clear plastic tubs used by Indian takeaway food shops are also good, but may require an eke (shallow box to fit the hive size) to give clearance under the roof.

Fondant is a nuisance to apply, it is much better to make sure in the autumn that supplies are adequate!

This may all sound rather complicated, but in practice it is relatively straightforward.

It is almost a criminal act to let bees in a hive starve to death.

In addition, the cost of feeding is a fraction of the value of the honey that the colony should supply in the following year.

A dead colony will supply nothing.

A couple of nice Bee Pictures



A bee working some Ivy



A marked up Queen

BEGINNERS PAGES

Introducing a new Queen into a Hive

This year we have had a few problems with beginners who have lost introduced queens. So I will try to explain the ins and outs of introducing a new queen into a queenless colony.

When you introduce a new queen into a new colony it is important that the colony and the queen are in the right condition to accept each other, otherwise you are heading for trouble. Firstly the colony must be **QUEENLESS**, the bees in the colony should be calm, and the introduction of the new queen should be done slowly. It is best if you starve the queen a little so that she will readily take food from the workers. Also her smell which will be strange to the workers should be masked or changed to something like that of the colonies. The best time to introduce a new queen into a colony is late August to early September and also in April when the colony will be fairly calm due to the lack of honey flows and drones, as this tends to make the colony excited and not at all calm. In the periods in between these times the bees are excited with foraging or frustrated with being stuck inside the hive on bad days with lots of nectar and pollen about that we get quite a lot of in the UK nowadays. Also they say it is better to introduce the new queen into a nuc first and then unite the nuc with the main hive shortly after. I myself have introduced the queen directly into the hive and had no bother but there you go. They say ask 4 beekeepers the same question and you will get 4 different answers and over the years how true I have found this to be.

There are many ways to introduce a new queen into a hive and a few variations on even these methods. The well known method is the use of the Butler cage. It is a simple way of introduction and is also a cheap way too. The cage is made of wire gauze with holes of 1/8 of an inch and made into a square sectioned tube of about three and a half inch long and 3/4 x 1/2. One end is plugged up with wood. You can also add a few long panel pins so that the cage can be fasted between the combs to stop it dropping to the floor. You can make these yourself, buy them from a good supplier or better still use one of the wives curlers or one of your own if you are that way inclined. Which ever way make sure that the holes are about 1/8th of an inches so that the workers can feed her and her being hungry will take the food from them. Make sure that the gueen is in the cage on her own as if she as any workers with her from where she as come, they will try to defend her and in the process maybe get her killed. A small piece of paper is put at the opposite on from the wood plug and can be held there with an elastic band to stop it coming off before the bees have bitten through it to release the queen The queen is then put into the hive between brood so that when she is released she is right away where she should be and where the workers expect her to be .You can clip the queen if you want but that is up to you. Mark the queen well before she is introduced as she will be a lot easier to find when you come to look for her later and also it is easier to do it now whilst you have her as do it in a hive full of bees whose only interest will be to have a go at you. All this should be done very quietly so as not to unduly stress out the bees and queen. Put everything back as it should be and then leave well alone for at least 6 to 7 days. With the holes in the mesh the workers will feed her, get to know her and her smell and they will bite through the paper and release her into he new surroundings. After the 6 to 7 days you can again gently open the hive, remove the cage or curlers and check to see if the gueen is OK.

Like I mentioned earlier, best done outside the swarming season, in April or Late August or September but if you need to do it in the swarming season, and really this should only be done your bees are not right, by this I mean if they are nasty, if they are prone to swarm as some of the Italian strains tend to do, or if the queen is an idle one. Really you should have none of these problems if your bees are British Blacks and the queen is changed every couple of years and you have carried out you swarm control methods properly. Please take a look at Bill Ainsworth's blog on the British Black Bee at www.arthurbick.co.uk/Black_Bees/Blog/Blog.html where there are lots of information on our native bees. Also we have many members who will only work the British Black who would be only to happy to share their knowledge with you.

So if you need to re-queen in the swarming season it is best done with the nuc method as this way the introduction is more likely to be successful. Find the old queen and either kill her or put her in a match box with some workers. This will depend on why you want to replace her. Use a 5 frame nuc box and put it besides the colony where you want to introduce the queen, making sure the nuc is facing the same way. The brood nest is looked at and an emerging frame of brood and emerging bees are found, and after a gentle shake to get rid of the old bees but not the young ones put it into the nuc. Find a second frame and do exactly the same, but this frame with mainly stores of food and pollen. Three or four frames can then be shaken over the hive to get rid of the old bees and then over the nuc to put the young bees into the nuc. The frames are then put back into the hive. You then put a new mated laying queen into the nuc in your Butler/ Curler cage between the 2 frames and then you put dummy boards at each side of the 2 frames. You then cover up the nuc and the hive and leave them again for 6 to 7 days. After this time you go and inspect the nuc first to see if the queen is out of the cage, is laying and all is well within the nuc. Take out the cage and the dummy boards and make sure that the remaining frames are put in the centre if the nuc hox

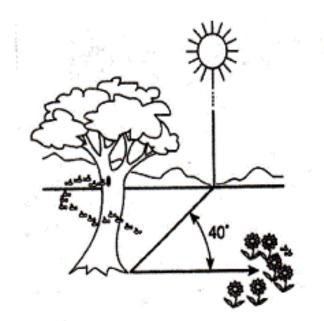
Open up the main hive and make sure the hive is queenless and also look to see if the bees are looking to swarm which you can tell if there are queen cells present, if so knock them down. The combs in the hive are pushed to one side of the hive and the frames from the nuc are placed in the space from which they were taken a week ago. A good thing to do is to spray the whole frames in the hive and the introduced frames from the nuc with a solution on water and a little sugar as this will stop the bees from running about on the comb as this will slow the bees down and then they will take in the water and sugar solution, thus giving them something to do. This will help a lot in making the introduction a success. Put everything back together and leave well alone for 6 to 7 days before you inspect again.

You can also use this nuc method at any time of the year to introduce a queen.

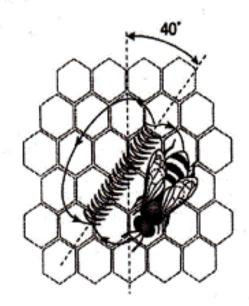
Coming back to the strain of bees and in particular the introduction of the British Black queen. It is very difficult to introduce a Italian queen to a stock of British Blacks, whereas if you put a British Black queen into a stock of Italian Bees it is quite easy. I have my own thoughts and opinions as to why but I best keep them to myself.

The WAGGLE DANCE OF THE HONEY BEE

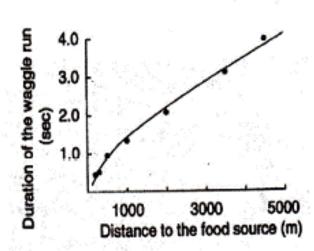
The patch of flowers lies along a line of 40 Degrees to the right of the sun as the bee leaves her colony's nest inside a hollow tree.



To report this food when inside the nest, the bee runs through a figure-eight pattern, vibrating her body literally as she passes through the central portion of the dance, the waggle dance



The relationship between the distance to the flowers and the duration of the waggle run.



From a copy of Gleanings, in the 1960's. Via Taunton and District Beekeepers Association.

The following suggestions are offered for the benefit of beekeepers with a few hives who do not have a permanent honey house. They are meant to supplement the information in books where everything seems so simple and easy. Many beekeepers, including myself, have learned some of these self-evident truths the hard way.

1. Honey is sticky. It will drip. Every doorknob, shoelace, telephone and radio button that is touched while uncapping or handling wet frames will become sticky. Walking spreads the honey around on the floor.

Solution: A bucket of water to rinse hands and a dishtowel are essential in the extracting room, especially if you are married and want to stay that way. Turn on the fan and radio, and get everything else ready, before getting all sticky. The garage, basement, barn or porch are usually better places to extract than the kitchen, providing you can keep the honey clean. Watch the kids.

2. Bees in the extracting room are attracted to light. Straggler bees left in the supers will find their way into the extracting room and will tend to fly towards a window or light bulb.

Solution: A small exit near the top of a window will allow them to return to their hives if they are nearby. If the hives are not nearby and you have a lot of bees in the room, hanging a few drawn frames near the top of the window with a caged queen will provide a place for them to settle and create a nice nucleus colony when you're done. A vacuum cleaner hose is an alternative. Don't extract directly under the only light bulb in the room.

- 3. Bees away from their hive are not inclined to sting. Bees carried into the extracting room in supers are normally extremely gentle, with no brood or queen present. However, they are very adept at stinging the finger that accidentally crushes them while picking up a frame or super. Beware.
 - 4. Household items can serve as good alternatives to supplies found in beekeeping catalogs.
- * A serrated bread knife makes a good uncapping knife. Use a sawing motion. No need to heat it. Change directions if it catches the wood. Some beekeepers really like using a hot-air electric paint stripper to quickly melt the cappings, but I haven't tried it.
 - * Kitchen strainers, nylon paint strainers, and women's nylon stockings can serve as good honey filters. Clean ones, of course.
- * Tupperware and Rubbermaid both make good plastic containers to hold honey and cappings. Honey is acidic, so don't use items such as aluminum and galvanized steel that will react with the honey acids. Stick with plastic, stainless steel or glass.

While there is a good household substitute for most extracting equipment, there is no good substitute for a good centrifugal extractor.

- 5. Let the honey settle. Honey that rests for a few days after extracting will not leave tiny bubbles around the rim of a jar. Be patient. Almost all debris left in the honey after filtering will either float or sink within a few days. A spigot just off the bottom of a container will prevent both floating and sunken debris from being accidentally bottled.
- 6. If there is no nectar flow, bees will rob honey. If the honey in an extracting room is more appealing than local flowers, the neighborhood bees will try to feast on it and tell all their friends.

Extracting is best performed in a closed screened room such as a garage, basement or barn, or outside after dark. I heard a story about a guy that brought some supers into his basement to extract the next day, but he left a window open. The next day he found that his bees had brought half the honey back to their hives.

- 7. Uncapping is easier with only 8 or 9 frames spaced evenly in a 10-frame super. The thicker comb means almost no scraping with the fork. After bees have drawn out the foundation the first season, return only 8 or 9 frames into each extracted super to make the next crop easier to uncap. Uncap all the way down to the wood on the top and bottom bar, regardless of how far the comb in drawn out, so the comb will be nice and even next year.
- 8. Propolis sticks to shoes and almost everything else. Extracting is a great time to clean propolis off the box edges and frame-rests, but if they are going to be scraped it is best to cover the floor with old cardboard, newspaper or a plastic painter's tarp so there won't be little propolis reminders of the extracting experience. Wax isn't quite as bad.
- 9. Butyric acid (Bee Go) really stinks. It works great, and is the best way for most hobby beekeepers to clear bees from the supers. The bees don't get as angry as brushing or blowing them, but that smelly fume board belongs behind the garage or near the fence when you're done. The chemical bottle belongs in a plastic bag inside an old coffee can or something else that won't tip over; this is stuff you do not ever want to spill. The almond-smelling Benzaldehyde smells better and works okay in cooler weather, but it still belongs outside. Bee escape boards work okay too, if you can install them the day before extracting, have enough escapes for every hive, and don't have too many holes between the boxes where the bees can enter and rob the honey. My equipment is old and leaks.

18 Things a Beginning Beekeeper Should Know to Help Things Run Smoothly on Extracting Day continued

10. Extractors, uncapping tanks and other extracting equipment are best borrowed or shared. Most hobby beekeepers will only use their extracting equipment one or two days each year. The rest of the year it typically gathers dust in an attic, garage or basement. Thus it is very practical and economical for several beekeepers or a beekeeping association to share equipment. The expense is avoided, and it eliminates the need for storage space. So borrow or share, and use some of that money saved to buy a few of the nice non-stick

polyurethane candle molds. If you must buy, a good quality hand-crank 4 frame extractor will suit most beekeepers better than 2 or 3 frame models, since it reduces the spinning work and thus greatly shortens the extracting time.

- 11. Extracting honey is best accomplished with two people. One person uncapping frames while the other spins the honey. Very efficient and the conversation can be good. It's not very stressful to a relationship either, unlike hanging wallpaper. If you have clean wax from an earlier extraction, a side candle-making operation is an effective use of time since candles take time to cool.
- 12. Warm honey flows best. Warm honey spins out of the comb faster and more thoroughly than does cold honey in an extractor. Warm honey also strains faster through a filter. Honey at 80 degrees Fahrenheit (27 c) or higher will be extracted most easily. This is normally not a problem in the summer, but in cool weather a light bulb under a stack of supers overnight can provide a lot of heat if the escape of the heat is controlled. Don't melt the wax!
 - 13. Extracted honey absorbs moisture from the air. Uncovered honey also catches insects, so keep the honey covered.
- 14. Sufficient honey containers are needed on extracting day. Enough containers need to be on hand when extracting, so it is good to learn how much capacity you'll need before extracting. In rough numbers:
 - * A shallow super will typically yield between 25 and 30 pounds of honey, or 2 to $2\frac{1}{2}$ gallons.
 - * A medium (6 5/8") depth super will typically yield between 35 and 40 pounds, or 3 to 4 gallons.
 - * A full-depth box will typically yield between 60 and 70 pounds, or 5 to 6 gallons.

Actual yields vary due to the number of frames, how well they are extracted, age of comb and other variables.

15. Wax cappings hold a lot of honey. Wax cappings typically hold 10% or more of a beekeeper's honey crop. Cappings should be drained of honey through screening. After draining, the cappings wax can be melted into a block. Melting is best accomplished using a solar wax melter, or by heating the cappings in an inch of water in an old pot. Feed the honey-water back to the bees.

Solar wax melters really do work well – use double-paned framed window glass and build around it. Alternatively, the cappings can be left outside for the bees to feed on and then thrown away

16. Utensils that are used with melted wax will not be used for anything else. Melted wax leaves a waxy film on every pot, spoon, dipping cup or strainer it comes into contact with.

Crock pots with an inch of water are good for melting cappings that have been drained of honey, but the pot will never be the same. Old crock pots are also near-perfect for melting wax during candle making, and they are often available at garage sales. Heat to between 150 and 180 degrees Fahrenheit; no need to boil.

- 17. Bad comb and rotten boxes should be replaced while extracting. Extracting provides the perfect opportunity to cull bad combs, frames and boxes that need paint or replacing. Have replacements on hand on extracting day. When short a few frames, frame feeders (also called division-board feeders; the kind that normally replace a frame or two) can be put in the empty spaces in the supers so any burr comb built there will be inside the feeder where it will actually be useful to prevent drowning when it is time to feed.
- 18. Let the bees clean the "wet" empty supers after extracting. Whether intending to return the supers to the bees or store them off the hives, the bees do a great job of drying supers after extracting. A stack of supers can be placed on a hive, over an inner cover that has a hole, and they will usually be dry the next day. Best to put them on the hives late in the day, to reduce robbing.

Every beekeeper has unique conditions, and there are many good beekeepers that use different methods, so enjoy experimenting with what works best!

BEE HEALTH - COMMON CONDITIONS

This month I will talk about three conditions which can affect brood but which are not caused by micro-organisms of any kind:

- 1. Bald brood. This condition has nothing to do with being follicularly challenged but refers to the presence of bee pupae in their cells, but without cappings. If they are fairly well-developed, their little pink eyes look upwards. The commonest cause of this is damage to the cappings by wax moth larvae as they tunnel along and the affected cells are often in lines. The worker bees detect this and remove the cappings, so leaving the pupae exposed. The pupae may develop normally, or their legs and wings may be damaged by coming into contact with the faeces of the moth larvae. Clearly the solution is to keep the wax moths at bay and normally a strong colony will do this on their own. The same condition may occasionally arise as the result of a genetic abnormality which induces the bees to remove the cappings.
- 2. Chilled brood. The description gives the cause here. Larvae which have been chilled for a period die. They can be mistaken for larvae affected by EFB, but they will generally still be in their c-shape and the segments will be apparent. The only visible problem is that they will be discoloured yellowish, brown or black. The brood will usually be in blocks and often near the outside of the brood nest. Anything which reduces the number of worker bees in relation to the amount of brood can cause this condition: a rapid build-up in early Spring, followed by a cold spell which induces the bees to gather together, adding frames of brood to a hive where there are not sufficient bees to cover them, separating brood and carrying out manipulations involving shaking all the bees into a lower box and leaving the brood on its own for a few hours. Poisoning, loss of a large swarm and loss of bees to their parent colony where a stock has been split within the apiary can all be factors.
- 3. Neglected drone brood. This can happen where the queen is a drone layer or there are laying workers. It can also happen if a colony is going strong and is hit by bad weather. In each case, some of the drone brood is simply not fed, so that it dies. The dead larvae may be thrown out of the hive or they may remain.

All of these conditions are better prevented, once they have occurred there is very little to be done, so bear them in mind and hope that you never see them.

About Extracting

The way things are going I'm going to end up with a lot of super frames that are not fully capped, hence not really fit to be extracted according to 'The Book'. However, as long a they are mostly capped and there is no new nectar in amongst it (The stuff that runs out when the frame is shaken) it should be OK to extract.

If in doubt, we should put the UNCAPPED frames in the extractor and give them a slight whiz round, collect that which has been extracted and use as cooking honey. Then we can uncap the frames and extract as usual, this gets round the problem fairly well, and the problem I am talking about is, if the bees have not capped the frames then there is too much water in the nectar and it is not what we can really call honey.

The biggest problem with this is that we can end up with the honey being spoiled by fermentation which changes part of the sugars into CO2 and alcohol. If you like to make Mead, and get 'Blotto' at little expense, you are half way there but it makes a damned mess, and all will have to be fed back to the bees. So be warned - thin honey is not good honey.

I think the reason for all this is that we have had some odd ball weather conditions since the good weather in the Spring of the year. The good spring gave us strong stocks but the honey flows did not materialise as they usually do.

If any one has a better idea then I would appreciate a comment or two.

We have had a comment from Bob on the last blog entry regarding swarming. This is one of the biggest problems we have in beekeeping. It takes a long, long time to learn how to get any sort of control of swarming. It is complicated and variable due to weather and the area you are in. The only advice I can give is that if you find a method that suits you, and the area in which you work, stick with it, you are lucky or clever, or both!

Artificial swarming and making nuclei both have a place in controlling swarming and the results of swarming. I would like to see a better way of dealing with swarming in our Black Bees in Pendle area, which being to the north of the Country and very elevated too, has it's own problems.

Explaining in print how to tackle swarming is very difficult there are so many "What ifs" and "How abouts". Also, swarming is an integral part of Queen raising so we should get more involved. I think we could do with some intensive demonstrations and discussions on the whole subject. I could try and get something arranged at my apiary and in the Hodge Hut over the Winter period, if you think it worth while.

Taken from Bill Ainsworths Black Bees in Pendle Blog. Links are from the Branch Web Site. ED

Technical Topics: About new Combs

Richard Alabone (Mr Beesy)

A frame with foundation holds great promise. All the bees have to do is to add wax to draw out beautiful comb, perfectly flat with no holes or drone cells and fully drawn all round up to the frame. But this is seldom achieved.

Bees sometimes totally ruin a frame of foundation by nibbling wax away from the wires or more often removing the wax against bottom and sidebars leaving unsightly holes; although it doesn't't have to be like that. A swarm will build beautiful brood combs even without foundation using either the honey they've brought with them or collected nectar. When a beekeeper feeds them they seem to lose the ability to make wax after a while and start robbing wax to pull out comb which spoils otherwise good frames because it leaves holes.

There are two other ways a perfect frame might be spoiled. Firstly, foundation often has a tendency to sag especially if it has paraffin wax in it, which is added to cheap foundation. This effect is worse in hot weather or when there are very many bees drawing out the frame generating too much heat. It causes bulge of the brood combs, sometimes just between wires where horizontal wiring is used, or bulge at the bottom where the foundation doesn't slip between the split bottom bar. Secondly, the whole sheet of foundation sometimes bows out from the center of the frame. This happens if the hive is not level, but also when bees cluster to draw the comb on one side only and their weight causes the sheet to bend.

Most beekeepers follow the advice to replace two or three brood frames each year with foundation, but often these will get spoilt for one reason or another; generally by robbing wax to cap brood on another frame. The best way to obtain new comb is to put on a whole box of foundation and feed, preferably when there is no natural flow, in June or July. If you feed just sugar and water I found that bees soon have difficulty producing wax; all they need is a little salt and acid. Two tsp. of salt in a gallon, with half a cup of fruit squash, seems to make all the difference. This information doesn't seem to be in beekeeping books, but it really does work. At one time I also added vitamin C and multivitamins, but they didn't' seem to help. But this method of making a whole box of comb has has advantages and largely avoids unsightly combs.

Having a stock of good comb has many advantages. When drawing out a whole box of brood frames it helps to exchange the side frames with the middle before they are full of stores and it's best to remove the box before it's all filled with stores. These frames may be used for a shook swarm, helping a nuc to build up or just replacing old brood frames, with the big advantage that there are no holes in the comb. On the larger frames, Commercial, Langstroth and fourteen by twelve, it is advantageous to put a vertical piece of wood on one side, down the center, about 0.3 inches square and fixed to the foundation with hot wax on one edge. This helps to prevent sag and eliminates bow ensuring that frames can be reversed or moved with impunity.

When it comes to super frames we have the same problem of bees nibbling holes in the foundation, which they will never fill. In fact a small hole will lead to a depression in a capped super frame, making uncapping very difficult. Brood frames should be replaced after a few years whereas the super frames last almost indefinitely. I still use some that are about 30 years old, and the ones with holes in are more trouble than they are worth. Try pushing a piece of scrunched up comb into the hole - it sometimes works. Where there is a good flow, the foundation will in general be pulled out properly, but with no flow the holes appear. This year I did an artificial flow on a shallow box of foundation while using my special feed with salt and acid. The result was perfect, but for a single small hole in one frame. The stores were extracted and used as feed, and then the box was put over the crown board to have the frames cleaned up. So, we don't have to put up with combs that are not flat or have unsightly holes, or are not even connected to the bottom bar at all; and uncapping super frames with depressions, due to holes, can take twice as long. It's best to recycle the frame, save the wax, and then try to get them pulled out tidily.

Finding Queens

I have not read the book on keeping bees without finding the queen but I would prefer to concentrate on being able to locate her whenever necessary. May I offer Eve Bingham some methods?

First of all, some queens will run when the hive is smoked, so gentle (or no!) smoking might be a good start. Secondly, if the queen is laying she is most likely to be on only one or two frames; she is rarely found on frames of stores, pollen, larvae, or sealed brood. Work steadily through the frames and concentrate on looking for the queen. If you have a companion pass the frames on for them to check other things. Deliberately scan each frame making anote of pop holes where she might hide. Remember that, if she is actively laying, then for a significant amount of time her abdomen will be inserted in a cell; it is therefore worth having a second look on each laying frame.

If you do not find the queen during this first inspection, then it is sometimes fruitless going through again; this will depend on the weather, the level of activity in the hive, the characteristics of that particular queen, and much more. If it is essential to find the queen, proceed as follows. Set up a second brood chamber and floor (preferably absolutely clean) about two feet and slightly behind the first. Inspect each frame as usual but rebuild the brood in the second box. Many of the older bees will leave the inspected combs and return to the original site (but the queen won't!) The frames can be spaced apart but in pairs; in time the queen will probably move to the inside faces of the comb. After a while, the bees in the two boxes may behave differently. The queen right half may have contented bees going about their business as if the hive was still closed, while the queenless lot might be running around trying to work out why communication with the queen is being lost. The pairs of frames can then be searched methodically; with fewer bees on the comb, and the queen probably only on one of the inside faces, you have greatly increased your chances of success. Be careful that the queen is not lost in long grass during this operation; beginners might put the second box up against the back of the first to eliminate this risk. Take every opportunity to study queens in observation hives and at apiary meetings. With experience, the way the queen moves, her red legs, and the workers paying court around her, will all be signs that are easier to spot than the long abdomen.

If you do not find the queen, close the hive, go away and think things through. Could the colony actually be queenless? Are there fresh eggs? Is the queen actually in the honey supers above a faulty queen excluder or slimmed down ready to swarm?

If all else fails and it is essential that the queen is found, try the following. Take each frame and shake all the bees into a bucket or brood box over a division board. You could shake the bees (as if the bucket had water in it) but it would not matter if some of the workers flew up – the queen would not fly unless she was on the point of swarming (in which case you might see all of them fly away and then you might never find her!)

Return the largely bare brood frames to the brood chamber, place a clean queen excluder over them, then a clean brood box, and throw all the bees into it. The workers will migrate down to the larvae in the open brood cells (especially if you smoke them) and you should find the queen trapped the wrong side of the excluder. Now mark her to make it easier the next time!

I hope this is useful!

Regards, Will Messenger

With thanks to Will Messenger, Warwickshire Beekeepers Association and E-Bees

BUYING SECOND-HAND EQUIPMENT

Many beekeepers buy second-hand equipment at some point, be it when they are starting up in the craft or when they wish to expand. Great savings can be made when you consider the price of new equipment. Here are a few pointers to help avoid disappointment. and reduce the risk of possibly contracting disease.

What should I check? Before buying make sure that hive parts are the correct size. The dimensions can be obtained from hive plans or some beekeeping text books. If clearances are too great, brace comb will be a problem and if too small, parts will be propolised by the bees i.e. gummed up. Similarly, it is worth checking the size or fit of anything else you are considering. Make sure that it is what you want!

Should I buy comb?

Never buy second-hand comb. It may harbour disease. If you should acquire it do not use it, burn it, render it down for exchange or make candles etc. Foundation that is professionally manufactured represents no risk to the spread of disease. What do I check when buying live bees?

If buying bees make sure that they are healthy. If you are not sure about the signs of disease get someone who is competent to look at then with you. Often at bee Fairs or Bee Auctions an Authorised Bee Inspector will have checked the bees beforehand. The auctioneer will usually say this has happened. This check only means that there are no visible signs of foul brood disease at the time of examination. It is done to safeguard against the spread of disease. Don't forget to check the hive or box that the bees are in when considering a fair value. Often bees sold in hives represent better value that buying hive boxes alone.

What should I do having acquired second-hand hives?

When you have obtained used hives, disinfect them before use. To do this, first scrape the boxes using a paint scraper, hive tool or other suitable instrument, so that the bits of wax and propolis fall into some cardboard or newspaper. This should be subsequently burnt. Be especially careful when cleaning the internal corners of boxes and the frame runners. Consider removing frame runners and replacing them with new ones after disinfection. When done, clean your scraper. Then disinfect in one of the following ways:

Scorch with a blowlamp. Make sure any remaining propolis boils and that the timber) darkens. There is no need to burn the timber. Be especially careful in the corners.

Boil in Caustic Soda. This is not very practical for the average beekeeper due to the caustic nature of the bath and the problems of disposal of the used solution. It requires great care and caution. The method is to prepare a bath using a solution of 45g sodium hydroxide to 38 litres of water and bring the solution to the boil. Wooden hive parts are then immersed in the solution for between 5 and 15 minutes. Then dip the parts in clean boiling water. After drying, the parts will probably need renailing. YOU MUST wear suit- able protective clothing when using this system.

Dip into molten wax. This requires specialist equipment which the average beekeeper does not have. For further details see a suitable beekeeping text book.

How do I disinfect plastic components?

Plastic components can be effectively disinfected using sodium hypochlorite. This -is present at a concentration of about 3% in household bleach. Check the container label for details and take suitable safety precautions. Research has shown that immersion in a solution of 0.5% sodium hypochlorite in water kills American Foul Brood spores in twenty minutes.. It is essential; that the spores are in contact with the solution so any items immersed need to be clean.

How about smokers etc?

Smokers and hive tools should be scrubbed clean using a soapy water solution. The hive tool should be scorched off using a blowlamp. DO NOT heat it to the extent that you damage the metal hardening. What should I do when buying second-hand beekeeping overalls?

These should be washed in the normal way. A small quantity of washing soda crystals mixed with the detergent helps to remove propolis. BEWARE when washing veils. It is best to wash them by hand. Putting them in a washing machine may cause damage.

How can I clean propolis off equipment?

A washing soda and water solution effectively dissolves propolis. It needs to be fairly strong, about 1 kg to 10 litres of water. A dash of washing up liquid in the solution also helps. You will need to wear suitable protective clothing, protect your eyes and use rubber gloves eg Marigolds.

With thanks to Richard Ball, National Bee Inspector

Propolis sterilises hives

Yes yes: intuitively we knew it must do, but the actual scientific proof was a bit thin. The well known antimicrobial properties of propolis give the whole colony a form of "social immunity", which lessens the need for each individual bee to have a strong immune system. Although honeybee resin is known to kill a range of pathogens, it is only recently that bees themselves have been shown to utilise its properties. A team from the University of Minnesota in St Paul, US, has published details of their discovery in the journal Evolution.

Honeybees in the wild nest in tree cavities. When founding a new colony, they line the entire nest interior with a thin layer of resins that they mix with wax. This is the mixture we know as propolis. They also use propolis to smooth surfaces in the hive, close holes or cracks in the nest, reduce the size of the entrances to keep out intruders, and to embalm intruders that they've killed in the hive that are too big to remove.

A number of studies have shown that propolis has a range of antimicrobial properties, but mostly in relation to human health. For example, numerous publications cite its effectiveness against viruses, bacteria and even cancer cells in humans. But Mike Simone, a PhD student and his supervisor Professor Marla Spivak at the University of Minnesota became interested in the effectiveness of honeybee propolis against bee pathogens, such as American foulbrood. "This led us to wonder what other things propolis might be doing for the bees," said Simone. In experiments funded by the US National Science Foundation, Simone's team painted the inside walls of hives with an extract of propolis collected from Brazil or Minnesota. This inside layer mimicked how propolis or resins would be distributed in a feral colony nesting in a tree cavity. They then created colonies of honeybees and housed either in hives enriched with resin, or hives without the resin layer - to act as a control. After one week of exposure they collected bees that had been born in each colony. Genetic tests on these 7-day-old bees showed that those growing in the resin-rich colonies had less active immune systems.

"The resins likely inhibited bacterial growth. Therefore the bees did not have to activate their immune systems as much," said Simone.

"Our finding that propolis in the nest allows bees to invest less in their immune systems after such a short exposure was surprising. Resins in the hive have been thought of as a potential benefit to a honey bee colony, but this has never been tested directly."

Using resins to help sterilise the colony can be thought of as a type of "social immunity" said the researchers. And it may partly explain why bees and other social insects, such as ants, collect resins to build their nests in the first place.

"Honeybees can use wax, which they produce themselves, to do all the things that they use resin for in the nest. So it is interesting to think about why they might go and collect resins," said Simone.

"Especially since resins, being sticky, are hard to manipulate and take a lot of energy for individual bees to gather in very small quantities."

There is also some evidence that some mammals and birds coat themselves in naturally-occurring plant resin in a bid to reduce infestations with parasites.

Story adapted from BBC NEWS: Published: 2009/07/23 09:43:28 GMT

Dear beekeepers - please circulate within your local association.

A major report on the impact of Neo-nicotinoid pesticides on honeybees and other insects has been compiled by the conservation charities 'Buglife' and the Soil Association. It will be presented to the

Prime Minister's environmental adviser today. The report brings together a huge range of independent research from all over Europe, you can download the report free from this link:

http://www.buglife.org.uk/Resources/Buglife/Neonicotinoid% 20insecticides%20report.pdf

How sad that such a major attempt to stop pesticides killing our bees has had to come from a range of environmental charities including Buglife and the Soil Association - but without the support or involvement of our national beekeeping charity - the BBKA, who have been utterly silent on this issue since the French banned these insect poisons in 2001. Sincerely,

With Thanks to Graham White of Warwickshire Beekeepers Association

The Pesticide Threat

Because bees live in large colonies and gather there food from a large area, they are particularly liable to accumulate in there hives large amounts concentrations of toxins that are unlikely to appear in the homes other species. This puts them in the uniquely vulnerable position of "being the canary in the coalmine" as regards to overall toxicity of our countryside and thus our food supply.

In other words when bees die through pesticide poisoning, it should ring alarm bells throughout the agricultural system that we ignore at our peril.

A study by Penn State Researchers presented in August 2008 at the National American Chemical Association in Philadelphia, found at least 70 different pesticides in the hives they looked at. Unsurprisingly they found fluvalinate and coumaphos (24) in every wax sample tested, showing that beekeepers themselves are responsible for at least some of the contamination. They also detected 70 other pesticides and metabolites of those pesticides in pollen and bees: who knew there were 70 different pesticides in use? In fact there are many more- in fact they are looking for 170 different chemicals.

<u>Every bee tested</u> contained at least one pesticide, and pollen averaged at least 6 pesticides with as many as 31 in a sample. I hope that shocks you. But that is just the start.

"We are finding fungicides that function by inhibiting the steroid metabolism in the fungal disease that target, but these chemicals also affect similar enzymes in other organisms" said James Frazer. "These fungicides, in combination with pyrethiorids and/or neonictotinoids can sometimes have a synergistic hundreds of times more toxic than any of the pesticides individually" The EAP only looks at acute exposure to individual pesticides, but chronic exposure may cause behavioural that are unmonitored. Yet, a North Carolina found that some neonictotinoids in combination with certain fungicides, synergized to increase the toxicity of the neonictotinoids to the honey bees over 1000 fold in lab studies (25).

24 Both chemicals have been widely used to kill Varroa mites.

25 As reported by Kim Flottum, editor of bee magazine, August 18th 2008

So profit motivated scientists at Bayer and elsewhere, who produce these poisons, which they recommend we spread around our planet, don't bother to research the possible effects of interactions between their particular brands of pesticides and all the others out there, which may multiply there toxicity to honeybees by 1000 times. And the bizarrely mis-named Environmental Protection Agency (USA) appears to rubber stamp the industries own research findings.

A major incident in Germany in May 2008, which killed well over 300,000 bees, some accounts say 500,000 was subsequently found to be caused by Bayer's Clothianidin used as a seed dressing. The Penn State research tells us:

In a EPA fact sheet on Clothianidin a commonly used nionicotinoid pesticide, it was disclosed that this chemical has the potential for toxic chronic exposure to honey bees through the translocation of Clothianidin residues in nectar and pollen. In honey bees the effect of this toxic may include lethal/or sub-lethal effects in the larvae and reproductive effects on the queen. Documented sub lethal effects of the neonictotinoids include physiological effects that impact enzymes leading to impairment of olfaction memory, motor activity that impact navigation and orientation and feeding behaviour, and memory impairment and brain metabolism, particularly in the areas of the brain used for making memories. When used as a seed treatment the chemical was present, by systemic uptake in corn and sunflowers in levels high enough to pose a threat to honey bees. In a 2002 survey for pesticide residues in France, Imidacloprid was the most frequently found insecticide and was found in 49% of the 81 samples taken.

Despite this "smoking gun", Bayer continue to deny that their nionicotinoids pose a threat to bees.

And what is worse, the current executive of the British Beekeeping Association have somehow been convinced by these same corporations to endorse a number of their toxic produces in return for payment, and to deny that pesticides play any role in the current poor state of bee health. Instead of supporting our Germany and France colleagues, who have suffered so much at the hand of Bayer *et al*, they have taken the side of the pesticide manufacturers. That such a vulnerable association, constituted to protect the interest of bees and beekeepers should be so corrupted by a handful of blinkered, misguided fools is shameful.

The above was is an extract taken from the book **Barefoot Beekeeper by PJ Chandler** which can be downloaded at a small cost of £7 from www.biobees.com

An Alternative to Smoking the Bees



Oasis rocker Liam Gallagher is campaigning to save honeybees from becoming extinct.

The singer has warned humanity is in "proper bother" if the honey-producing insects die out as a result of using pesticides around their hives.

He calls for people to take action.

"You've got to look after the birds and the bees, man,"

Contactmusic quoted Gallagher as saying.

"The bees are vanishing. We've got to save them before they all buzz off. It's important. It's a really worthwhile cause. Without them we're in proper bother," he added.

He says that honey helps in protecting his voice, even though he dislikes the taste.

"If it weren't for honey, I'd have a rough voice," he said.
"I'm much more worried about my voice. For years I
never warmed up before a concert. I'd just stand around
smoking and stuff.

"But people spend lots of money to see us and I respect that. I don't want to go on stage sounding like an idiot. Now I drink herbal drinks and s**t. And honey. I f***ing hate it though," he added.

Campaigners have welcomed Gallagher's stance and are delighted to have him speaking about the plight of UK honeybees, A spokesperson for the Co-operative – who are backing new movie 'Vanishing of the Bees', which warns of the danger of the insects becoming extinct – said: "We're thrilled Liam recognises the urgency for action."

Great news as what ever you think of him he as loads of influence with the younger generation who are the future of bee keeping. Also Mick Jagger is well into beekeeping too. Maybe we could invite them both to one of our meetings. WATCH THIS SPACE ED

I picked this up out of a an book by the Rev J.G. Diggles written in 1904 which may be of interest. Its regards to a alternative to smoking the bees.

The Carbolic Cloth.

Is also a subduer of bees, and by some is preferred to the smoker. In certain conditions it is easier to work with that the smoker, and once prepared it requires little or no attention during a long period. Ticking, Calico or muslin 20" x 18" may be used, with (if preferred a hem on one 18" edge to take a lathe. A solution of Carbolic Acid, one parts to ten parts of water is prepared and with it the cloth is thoroughly saturated. If the cloth when not in use, be kept in a close shut tin box, it will retain its objectionable smell for a long time. The solution should be shaken before use. Sprinkle a little also on a feather.



Opening the hive

Go now to the hive, which you want to examine. Blow only one or two puffs of smoke through the entrance of the hive, remember your objective is not to smother the bees, but just send them to dinner. Rap smartly with your knuckles on the sides and roof of the hive; set down your smoker, nozzle up, so that it draws like a chimney; before proceeding further. Then place the feather half its length into the entrance to put a stop on the bees there; remove the roof and quilts, leaving only a sheet on the frames. By this time the bees will have gorged themselves into good humour. Your position will now depend upon the arrangement of the frames in the hive. If they hang at right angles to the front, stand at the side, if they hang parallel to the front, take your position at the back. Hold the carbolic cloth by the lathe and let it hang down the outside of the hive opposite you. Pick up the corners of the sheet and slowly draw it back upon itself towards you so bringing the carbolic cloth over the frames as illustrated. Not one bee will bet out if this is done carefully. Instantly the bees will begin to make music- a peaceful symphony which may encourage you. Remove the cloth or roll it back off two or three frames- you will find their heads in the cells, or moving about in a bewildered fashion, gentle as lambs, and disposed to treating you with every courtesy if only you reciprocate their gentility.

Believe it or not, I have tried it and this really works and they do say that the oldies are the goodies,

Michael

Preparing Creamed or Soft-Set Honey.

Introduction

Creamed or soft set honey is the ideal way to market a honey that is otherwise likely to start granulating in the jar (e.g. oilseed rape honey). While some people may be a little suspicious of spreadable honey, they can generally be persuaded when you explain that it spreads like butter and that it won't go solid and have to chipped out of the jar like beef dripping! In his original process, patented in 1928, Professor Dyce took great care in conditioning the honey to be creamed. In a first step he heated it to filter out wax flakes remaining from the extraction process and then again to a higher temperature to make sure that no crystals were present and that yeasts were killed. The temperatures used are slightly damaging to the aroma and flavour of the honey but we are preparing this honey mainly for the customer, not a honey judge (see Note 1).

Stage 1

Honey for creaming may be crystallising or have already set. In either case, it will need to be made completely liquid again. To do this it is heated for half an hour at $140^{\circ}F/60^{\circ}C$ in a double boiler and stirred frequently to ensure that no crystals are present and also to minimise the time taken to reach the required temperature. The honey is next poured through a fine filter cloth. A Thorne's filter cloth can be used but two thicknesses of fine un-patterned nylon net curtain also suffice. It is important to filter the honey finely as any foreign bodies or specks will show up very strongly against the light-coloured creamed honey. We should remember that we are preparing a premium product and intend to offer it at a premium price, so it must be premium quality. The liquid honey is then cooled as rapidly as possible to $15^{\circ}C$. Any melted wax and fine bubbles of trapped air form a fine white scum on the surface of the honey which can be gathered using a flat-ended spatula and removed with a shallow spoon. (Leave the honey for 24 - 48 hours before skimming).

Stage 2

A finely granulated seed honey now needs to be added to start the creaming process. Typically, softened oilseed rape honey will be used, which needs forcing through a fine metal sieve using the back of a spoon. This is hard work the first time, as you need to add between 5% and 10% of seed honey to your main batch, but this needs doing only once as sufficient honey from each subsequent creamed batch can be used to seed the next. This seed honey is then stirred into the main batch using a powerful slow-turning electric drill with some sort of agitator fitted. The honey is kept at about 15°C (the ideal is 14°C) and stirred two or three times a day, keeping the stirrer well down to try to avoid entrapping any more air. Neither should it be stirred for too long as this could raise the temperature of the honey. Stir thoroughly for a couple of minutes, especially near the bottom, as any larger crystals will sink. The point of the stirring is to break up any crystals of glucose to make them as small as possible. Although the thermostat on the warming cabinet may be calibrated, a thermometer should be used to make sure that the temperature is correct.

The honey will stiffen and become paler due to the increasing number of fine glucose crystals, the speed at which it does so depending on the base honey used. Stiffening is the best indicator that setting on the way. When this happens the honey needs to be packed in jars without delay, although if it does set in the tub you can always reverse the process sufficiently with a warming cabinet by slightly increasing the temperature.

Notes

- 1 If you want to try for first prizes in creamed honey show classes I would suggest using a strongly flavoured honey, which you would have to filter slowly to avoid heating. A bland honey can also be improved by blending with a small quantity of a strongly flavoured honey such as heather. The outcome that you are striving for is something like butter. With that in mind you have to remember that the first batch that you make contains up to 10% of the seed honey, which you will feel on your tongue. However, subsequent batches will only contain 1% seed honey because you save enough from the initial batch to use as a 10% seed for the next mix. These will have a smoother texture, which is something judges look for.
- 2 As a result of the closure of the Allscot sugar beet processing plant, there has been an increased sowing of oilseed rape as a break crop in Shropshire. It is important to try to keep rape honey out of supers to be used for the main season's honey as even the tiniest quantity of remaining rape honey will trigger granulation in a honey otherwise unlikely to do so. I realised the extent of this problem when some borage honey rapidly granulated after extraction, the frames having been used earlier in the season to harvest rape honey, the witness being that a few jars of borage honey remaining from that season have still not granulated over two years later.

PROJECT DISCOVERY

Those of you who are not members of BIBBA (the Bee Improvement and Bee Breeders Association) may not be aware of this work. (I have to ask why you are not members!) BIBBA is trying to identify locations where there are native and near native honeybees around the UK and Republic of Ireland; it has received a grant of £10,000 from the Co-operative Society for this work. Samples submitted by beekeepers are now being checked for their wing morphometry – but more samples are needed! If you think that you have native bees, or know of any feral colonies, then please contact BIBBA, Terry Hitchman or me (Terry and I are now both on the BIBBA committee). Samples that pass initial visual and morphometric tests will then be DNA tested at the University of Leeds. Whilst at the SICAMM conference (reported last month), we met Catherine Thompson, a PhD student at Leeds University who is involved with this work. Catherine is also looking for feral bees and she came to Stratford to sample two local feral colonies – one in Clifford Chambers which seems to have survived for at least 15 years without treatment, and another in a tree in Henley discovered by Denis Keyte. We were also able to take Catherine to our review meeting with Dave Chandler and Gillian Prince (reported last month) which appears to have been mutually beneficial. Catherine has kindly supplied this information about her work (there are photographs on the website version):

Native Honey Bee Study 2009-2012

The hunt for A.m.m. (Apis mellifera mellifera) or the native honey bee has begun in England and Wales. Why Apis mellifera mellifera?

A.m.m. is the native bee to this country and is thought to be better adapted to local conditions than other races. However, the status of the A.m.m. in the UK is not known. It was reported by Brother Adam that the Black bee had been completely wiped out in the early 1900's (Pritchard, 2008). This has since been refuted but to what extent the pure race remains is unknown. A.m.m. faces threats from importation of foreign strains, as well as the other difficulties of disease, starvation due to insufficient forage, the effects of pesticides and agricultural intensification. The three tiered approach:

- 1. Search areas 10 km from the nearest known beekeeper to identify semi isolated populations
- 2. Examine unmanaged honey bee colonies genetically and morphometrically
- 3. Examine domestic honey bee colonies genetically and morphometrically

Areas 10km from the nearest known beekeeper:

If honey bee colonies are surviving remotely from beekeepers they are likely to be the native UK bee, and relatively free from hybridisation with imported strains.

Using data on beekeeper locations and colony number from FERA (Food and Environment Research Agency) areas up to 10km from the nearest known beekeeper were identified. This is generally considered to be the maximum distance queens and drones will fly to mate (Lodesani, 2005, Solignac, 2005). In a well populated isle this presented only a few sites. These were then further reduced to sites where honeybees could survive as feral populations, i.e. forest landscapes but not open moorland. The three areas remaining were Kielder Forest, Ennerdale Forest and Tywi Forest. These are all Forestry Commission owned plantations. Two out of three of these locations were checked during the summer of 2009 using pollination sampling techniques such as pan trapping and vegetation transects. While all the data has not yet been processed, preliminary investigations show that honey bees are largely absent. Forestry plantations are often harvested around 30 years of age. This gives little opportunity for cavities and holes to appear in the trees that honeybees could occupy. The stands of conifers are also very dense so much of the flowering plants are limited to forest trAcks and recently felled areas.

Wild honey bee colonies:

While it seems that wild honey bee colonies cannot exist in remote areas of the UK due to the quality of the land-scape, wild or feral honeybee colonies are often reported in areas close to other beekeepers. It would seem likely that these colonies are annual swarms from local beekeepers that ultimately perish without human intervention. Anecdotally however, stories exist of colonies surviving for decades with no management at all. Can this be true and is there anything special about these bees that ensures their survival? To explore this further 26 samples of honey bees from unmanaged colonies have been taken. These will be used:

- To assess genetic relatedness to A.m.m.
- To examine disease load
- To examine longevity of unmanaged colonies

INTERNATIONAL NEWS

<u>FROM USA</u> <u>URBAN BEEKEEPERS IN NEW YORK</u>

Despite city regulations prohibiting it, hundreds of New Yorkers have kept bees on rooftops and back 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>FROM MALASYA</u> <u>FAKE HONEY FACTORY RAIDED</u>

Four men, aged between 30 and 70, were detained at Kampuang 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 the police, made the raid about 10 am 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 tourist.

Bee Eating Hornets arrive in France

As if varroa, small hive beetle and EFB weren't enough to worry about, we now have an article by Lizzy Davies in The Guardian (26 Sep 2009, Page 23) that reports For five years they have wreaked havoc in the fields of south-western France, scaring locals with their venomous stings and ravaging the bee population to feed their rapacious appetites. Now, according to French beekeepers, Asian predatory hornets have been sighted in Paris for the first time, raising the prospect of a nationwide invasion which entomologists fear could eventually reach Britain. Claude Cohen, president of the Parisian region's apiculture development agency, said a hornet nest had been found this week in the centre of Blanc Mesnil, north-east of the capital. If confirmed by further testing, the find will raise fears that the spread of the bee-eating Vespa velutina is no longer limited to the Aquitaine region near Bordeaux, where it is believed to have arrived on

board container ships from China in 2004, and the

surrounding south-west.



PARIS

In the romantic city of lights, the bees are downright busy.

Common sense says it is better to keep hives of stinging insects in the countryside, away from city centers packed with people. Yet on storied rooftops and public gardens in the urban jungle of Paris, the bee business is thriving.

Bees are disappearing from fields across France and elsewhere in the world, victims of a slow decline in number because of loss of habitat compounded by a recent and mysterious catastrophe variously blamed on disease, parasites and pesticides. The most recent science research points to a combination of interacting diseases for new collapses of bee colonies.

But in the heart of the French capital, Nicolas Geant is preparing to sell off his honey. It comes from hives on the edges of the soaring glass roof of the Grand Palais exhibition hall, just off the Champs-Elysees.

"Paris has many balconies, parks and avenues full of trees and little flowers that attract many bees for pollination," said Geant, who has 25 years of experience under his belt.

The Grand Palais beehives went up in May. They also sit in the Luxembourg Gardens, on the gilded dome of the 19th Century Palais Garnier and the roof of the ultramodern Opera Bastille.

"In Paris, each beehive produces a minimum of 50 to 60 kilograms (110 to 130 pounds) of honey per harvest, and the death rate of the colonies is 3 to 5 percent," said Henri Clement, president of the National Union of French Beekeepers.

"But in the countryside, one beehive only gives you 10 to 20 kilograms (about 20 to 40 pounds) of honey, and The death rate is 30 to 40 percent. It is a sign of alarm."

Honey Beer

And here is a nice Mead recipe

Made mead? Why not try some honey beer?

Ingredients:

1 lemon •1.5lb dark honey

•half an ounce of hops •1 teaspoon granulated yeast (a beer

one would do - or bread yeast)

•1 gallon water

Method:

Peel the lemon rind, avoiding the white pith. Squeeze the juice and strain to remove pips.

Dissolve the honey in 2 pints of the water in a bucket. Put the rest of the water into a large pan with the hops and lemon rind.

Bring to the boil and boil gently for 30 minutes. Strain the hop water into the honey solution and leave to cool.

Discard the hops and lemon rind. Add the activated yeast and lemon juice into the cooled mixture, cover over and leave for 3-4 days in a warm place to

ferment.
When fermentation has ceased, siphon into sterilised 1 pint beer bottles, leaving an airspace at the top. Add half a level teaspoon sugar to each bottle.

Seal with plastic pop-off caps and leave in a warm room to ferment in the bottles for a few days. Then store for at least 2 weeks in a cool, dark place before

drinking.

Thanks to Cambridge BKA and e-Bees

Basic Wildflower Mead

Ingredients

4 jars of honey (preferably wildflower) 1 gallon water 1 cup full of white raisins 1 egg white Yeast

To one gallon of water add the 4 jars of honey and the white of one, egg, mixing WELL. Cook the mixture at medium heat on the stove, stirring continuously. When the mix comes to a boil all the scum rises to the top to be skimmed, assisted by the egg white, just like you clear stock. When no more scum rises add the raisin, turn off the heat, and cover overnight. In the morning crush and strain out the raisins, add the yeast, and transfer the liquid (called 'must') to a glass jug with a fermentation lock. Keep any excess to top off the mead after racking.

The first racking should be done after one month and the next when fermentation stops. Rack again about three, months later. It is important to keep the mead topped off to keep the airspace in the bottle to a minimum. When you can read newsprint through the jug of mead, bottle and cork. Don't touch for at least a year.

Nasty Bees

We have in the past had lots of suggestions, articles written and questions raised on the subject of how to get rid of nasty bees Our member Paul Aldred as found the solution and in the picture below Paul is demonstrating how it works





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

Contributed by Saipin Birt

BOOKS

BEE BOOKS NEW AND OLD

Send sae for latest list. Yates' Study Notes, White's Honey in the Kitchen, Ransome's Sacred Bee always available. Access, Visa & Master card welcome. The Weaven, Little Dewchurch, Herefordshire HR2 6PP - Tel 01432 840529 www.honeyshop. co.uk

JOURNALS

AMERICAN BEE JOURNALS

Subscribe now to the oldest bee magazine in the English language. Amateur, professional and scientific news makes ABJ an attractive buy for any beekeeper. World-wide crop and market page, an outstanding feature. Order from UK agents E. H.Thorne (Beehives) Ltd, Wragby, Lincs LN8 5LA. Tel (01673) 858555 Fax (01673) 857004 Regular Subscription Rates 1 year - £34.00; 2 years - £66.00. Air mail rates are available upon request.

THE AUSTRALASIAN BEEKEEPER

Senior Beekeeping Journal of the Southern Hemisphere.
Complete coverage of all national beekeeping topics including overseas news in one of the world's largest beekeeping countries. Extensive local and some international advertising.
Published by Pender Beekeeping

Supplies, P.M.B. 19, Maitland 2320, Australia. Payment by bank draft in advance. Free copy with overseas mailing costs on request.

BEEKEEPING

The West Country Journal - written by beekeepers for beekeepers about beekeeping; ten issues per year, non-members UK £11.50 per year, overseas surface mail £16.50, Air/EU £17.50,

elsewhere £24.50. The Subscription Secretary is Brian Gant, 2 Abbey Grange Close, Buckfast, Devon, TQ11 0EU.

BEE CRAFT

A full colour monthly beekeeping magazine, for beginners and experts alike, covering all aspects of beekeeping in Great Britain & Ireland. FREE SAMPLE COPY on request. £22 for 12 issues. Credit cards accepted. Contact Bee Craft Ltd., 107 Church Street, Werrington, Peterborough, PE4 6QF. Tel/Fax +44 (0)1733 771221.

EMAIL: SECRETARY@BEE-CRAFT.COM WEB: www.bee-craft.com

THE BEEKEEPERS QUARTERLY

The Large Format Illustrated
Magazine for the keen beekeeper only £24 per year
from Northern Bee Books, Scout Bottom Farm, Mytholmroyd, Hebden Bride, West
Yorks HX7 5JS.

IRISH BEEKEEPER

Read An Beachaire, published monthly.
Subscriptions £15 sterling per annum, post free. Sample copy from David Lee, Scart, Kildorrery, Co. Cork Ireland.

ULUDAG BEE JOURNAL

Publication of Uludag Beekeepin Association, published quarterly in Turkish (with English in all aspects of beekeeping, beekeeping news, practical beekeeping, research articles. This publication is considered a link between Turkish beekeeping and the rest of world. Please visit our website www20.uludag.edu.tr/-ularit-Gazcylar cad.

No. 9/2 16220 Bursa-Turkey fax: +90 224 224 3964

<u>INTERNATIONAL BEE RESEARCH</u> <u>ASSOCIATION</u>

Read all about it! The Journal of Apicultural Research incorporating Bee World. Access a wealth of knowledge from the world's premier information service on all subjects

relating to bees and beekeeping.

Contact I.B.R.A., 16 North Road, Cardiff, CF10 3DY.

Tel: (029) 2037 2409 E-mail: mail@ibra.org.uk Web:

www.ibra.org.uk

GARLIC HONEY

by Marlene Harris Courtesy of Essex BKA. and E-BEES.

Place 30 cloves of garlic in a big glass container and add one and a half pounds of runny honey.

Be careful to leave a 2cm gap between the honey and the rim of the bowl.

Cover and leave the bowl in a warm place for at least one week, stirring occasionally.

Gradually the garlic cloves dissolve in the honey, turning it into a tasty garlic syrup.

Garlic honey makes a wonderful addition to all your marinades and salad dressings.

It can also be used to dress meat before roasting. Not only is it full of flavour, it is packed with goodness! Garlic is a well known remedy for coughs, fever and acne, helping to

cleanse our systems.

And for real garlic lovers, try it with ice-cream!

PLEASE SUPPORT THE FOLLOWING

NORTHERN BEE BOOKS

OVER THE PAST FIFTEEN YEARS OR SO WE BEEKEEPERS HAVE HAD TREMENDOUS SUPPORT FROM NORTHERN BEE BOOKS. WE WOULD LIKE TO THANK THEM BY PUBLICISING THEIR WEBSITE

WWW.BEEDATA.COM

THE POSTAL ADDRESS IS:

NORTHERN BEE BOOKS SCOUT BOTTOM FARM MYTHOLMROYD HEBDEN BRIDGE HX7 5JS

PHONE 01422 882751

BY THE WAY, THEIR PUBLICATION BEEKEEPER'S QUARTERLY CAN BE OBTAINED FROM OUR TREASURER AT A CONCESSIONARY RATE

FOR ALL YOUR BEEKEEPING SUPPLIES

Contact Judith David

agent for Thornes Beekeeping Equipment

> Hoarstones, Fence BURNLEY BB12 9EA Phone 01282 693330

Always telephone first - early morning or teatime are the best times to find us available.

A phone call will guarantee your order will be at the next beekeepers' meeting

._____

CLEAVER GROUP (MEAT) LTD

Established over 45 Years

SPECIALIST MEAT & FREEZER FOOD SUPPLIERS TO THE CATERING TRADE

CLEAVER GROUP

TELEPHONE OR FAX 01282- 698032

EMAIL: cleavergroup@talktalk.co.uk

2-4 BRADLEY ROAD EAST, NELSON

BB9 9UB

Darwen Brew



Suppliers
and distributors of
Home Brew kits, ancillaries
& equipment for
Beer,
Wine and Liqueur making.

The Mound, Pole Lane, Darwen, Lancashire BB3 3LD United Kingdom Telephone: 01254 772780

Email:home.brew@talktalk.net

Holidays

Tired with the noise and pollution and the same old Costa Holiday?????Then why not try a different Costa Holiday.

Come to Costa Geminiano

An Italian Rustic Farmhouse in the mountains of Emulia Romagna Province of Parma

The property is situated at 650 metres above sea level on the edge of a small quiet village amid beautiful unspoilt Countryside. The nearest town Bardi is 12km away.

Accommodation comprises of 3 double bedrooms and 1 single bedroom. Self catering with meals can be arranged if requested. Guaranteed no Internet, no TV, no en suite bedrooms, no discos and frilly duvets- just the sounds of birds, cockerel alarm call and bees. Bring your own veil and walking boots for exploring the countryside.

Price per week 650 euros. Short stay B & B @ 30 euro per night

Interested, need to know more ring Jenny on 0039052576169

