

Newsletter of The Blackburn and East Lancashire Branch of The Lancashire & North West Beekeepers Association http://homepage.ntlworld.com/alan.huxley

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Editorial

DECEMBER 2005 HAPPY CHRISTMAS

Lest I should forget. Let me start with a very merry Christmas from Arthur and myself.

LOOKING BACK

As we are near to the end of one more year. Let's look at what we have done with 2005.

The Monthly meetings were attended fairly well but could be better. The honey show this year was different, the Judge did the judging with us as an audience and demonstrated what he was doing and how he came to his decisions. Results are on page 12. Thanks to Pauline for a job well done.

Next year Carolin Coughlin takes the job on, and Pauline has promised to hold her hand for 12 Months.

ANNUAL GENERAL MEETING

The AGM at Ken Gaiger's was a good business meeting. No dramatic changes to the officers or committee. All went without a hitch.

In Any Other Business we had the very satisfying presentation of Basic beekeeping certificates to Phil Ainsworth, Paul Aldred, David Bush, Calolin Coughlin, John Zamorski, and David Barrett. With a big round of applause to all of them

A comparative new member Paul Aldred. Has taken the job of apiary manager along side David Rayner

EDUCATION

Paul Works for Leyland Daf, has just started a 5 year degree course in engineering and intends to do all the exams in the beekeeping education syllabus.

What with a wife and family also, he has a lot on his plate. He has done a good job at Holden Clough this year, and after some well deserved criticisms of the purpose of The Ken Preedy Memorial apiary at the AGM. We hope that the two managers will turn things around.

BROOD BOXES

I have acquired Some very old brood boxes and super boxes from the widow of Jonathan Baldwin, if you want any of these. please ring me 01282 614015.

EMAIL

There are often times when it would be useful if we could notify you of something at short notice or even remind you of an event or activity which you may have forgotten about.

If you have an email address why not just drop a short email to bill@scotroad1.free-online.co.uk. You don't need to send a long message just something like "please add me to the "Early Warning" list.

DIARY

If, like me, you make a note in your diary of proposed Association events, we have listed dates for 2006. A proper programme will be sent with Beetalk in March. Venues and speakers are in the process of being arranged.

Wed 29 Mar Sun 23 Apr Sun 21 May Sun 17 Sep Sun 21 May Sun 8 Oct Wed 8 Nov Sun 23 Jul

Merry Christmas



As your newly elected Chairman may I take this opportunity to wish you, on behalf of the Committee of our Club, a very Happy Christmas and a Prosperous New Year. After what appears to have been a good year for honey gathering let us look forward to another good year, free from disease and disasters, working with happy and contented bees. I look forward to meeting you at the various venues throughout the year, because without your support we cannot function properly as a Club.

Merry Christmas from B. Jackson.

LEGALISATION OF OXALIC ACID

by Silke Beckendorf.

The Standard Authorisation of the 'Trickle Method' for the application of Oxalic acid as an anti Varroa treatment is at this present time being evaluated by the incumbent authorities.

According to Dr Eva Rademacher, Lecturer at the Free University of Berlin, the authorisation of the 'Trickle Method' is highly likely. After a positive result by the expert panels of the Federal Ministries for Health and also Consumer Protection for Food and Agriculture, the Standard Authorisation will be referred to the Federal Council. After agreement has been reached oxalic acid by virtue of a change in the law will be made available by Standard Authorisation.

The competent committee responsible for this matter convenes annually in May, however, Rademacher is hopeful that a positive decision by the Federal Council will be made soon. If this were the case hope exists that oxalic acid will be able to be applied (legally) in the autumn of 2005.

During May 2004 wide ranging documentation regarding oxalic acid was submitted to the competent authorisation committee who decided in December last year that the spray method of application should be allowed and that the vaporisation method required further pharmaceutical aspects to be investigated. The background documentation relating to the trickle method was deemed to be sufficient.

The ivory towers, as predicted, are beginning to crumble in the face of common sense and overwhelming positive evidence.

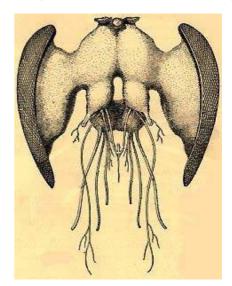
This is, of course, a German document. Lets hope our own people pick up on it very quickly.

I have just read a article from Ireland, there was a list of just about all the chemicals that can be used on varroa, with all the ins and outs on them, when it came to oxalic acid it just said, in bold letters, "IT WORKS." Ed.

BIRDS, BEES AND MONKEYS

Australian research shows that despite the small size of a bee's brain, it is up there with monkeys and pigeons as far as working memory is concerned.

A honeybee's brain is small in size and may



BEE BRAIN

even be able to fit on the head of a match, but a research team says that the bee's working memory is almost as effective as that of a pigeon or a monkey.

WORKING MEMORY

Working memory is what a person relies on for those few seconds between reading a number from the phone book and punching the number into the phone, explains Shaowu Zhang of the Australian National University in Canberra. He and his colleagues tested honeybee memory by training bees to use exit signs in a chamber to find their way to a treat. To make the correct choice, each bee had to remember a clue it had flown by on its way into the chamber.

"The working memory in a bee is robust and flexible," says Zhang. A short-term memory lasts about the same time in a bee as in a pigeon, he says. And a honeybee's memory is flexible enough to perform a simplified version of a task employed to test memory in rhesus monkeys.

REMEMBERING

To look at details of the bee's working memory, Zhang and his colleagues used variations of a layout with a wooden tunnel leading into an upright pipe. The two exit holes from the pipe were marked with different patterns. The researchers put a partition in the tunnel with a hole for bees to fly through. The partition carried a pattern, such as stripes slanting left. Bees had to remember the pattern and pick the matching pattern on one of the exit signs to reach the treat. During a bee's training, the researchers regularly switched the patterns.

Once a bee was choosing correctly about three times out of four, the researchers repeatedly lengthened the tunnel beyond the partition. Thus, the flying bees had a longer and longer delay between seeing the pattern and matching it to the exit sign.

SHORT TERM MEMORY

The bees' memory of that pattern remains strong for about 5 seconds, the researchers report in an up coming Proceedings of the National Academy of Sciences. In field tests, bees tend to choose flowers that resemble the one they visited some 5 seconds earlier. Birds' short-term memory lasts a similar time.

TESTING FLEXIBILITY

To test flexibility of memory, Zhang and his colleagues put two partitions with patterns in the tunnel and taught the bees to pay attention to only one partition, such as the first one encountered or the one at a specific distance from the tunnel mouth. The bees still managed to match patterns even when researchers marked the partitions and exits with patterns not seen in training. The bee test was a two-option version of a memory test in which rhesus monkeys can distinguish more options.

FLEXIBILITY

Thomas Collett of the University of Sussex in Brighton, England, says that the clues used by bees in the study aren't clear but their flexibility is interesting. Also, he welcomes the memory-duration finding as a "valuable contribution, since measurements haven't been available before."

VARROA QUESTION

Why Do Dust-like Materials Dislodge Varroa Mites from Bees?

There are three possible explanations for the efficiency of dust-like materials in recovering varroa mites from adult honey bees.



FIRST

varroa use sticky pads to adhere to their host. Dusting the bees may make it difficult for the mites to adhere or cling to the bees.

SECOND

dusts seem to stimulate the bees' grooming behaviour. When dusted, bees begin to groom themselves and persist at grooming for an extended time.

THIRD

dusts on the mite's body may stimulate it to release from its host to groom itself. The "sugar roll" technique is an inexpensive, efficient and quick way to detect and assess varroa mite infestations.

Furthermore, there is no risk of leaving toxic residues in the hive, and the bees can be returned to the hive unharmed after the process. (University of Nebraska)

CHINESE PROVERB (1)
To carry a grudge is like
being stung to death by one
bee

HOPES FOR JULY 2005

Suitable Weather Conditions for the main Honey Flow

We are all hoping that the weather conditions during the main honey flow will be kind and generous to all our beekeeping friends. Generally speaking our main honey flow commences in the middle of June and terminates at the end of July.

The June gap or the slack flow takes place during the first half of the month of June. This is caused



by the cessation of blossom from trees, shrubs, fruit and early flowers during that period. Old experienced beekeepers recommended putting on the supers when the first clover bloom appears on the roadside.

The weather we experienced during the early flow was not suitable. This was caused by cold north-east winds during the month of May. The majority of our colonies came out of the winter period in good condition. The spring blossom was late coming on stream this year. When it did come it was beautiful and plentiful, but the temperature was not high enough to

allow the bees to fly, or the blossoms to yield nectar. We now look forward to the main flow from the clover and bramble.

Thanks to D.J.Deasy. The Irish Beekeeper

DAN DEASY R.I.P. I have just heard the sad news of the death of Dan Deasy who passed away peacefully earlier this month. Regarded by many as the father of modern beekeeping in Ireland, he was also the oldest surviving member of BIBBA in Ireland. He celebrated his 95th birthday on the first of April last.

SWARM CONTROL THIS YEAR.

On my first inspection of the apiary this year I hope to find the queens, and mark and clip those that have not been done already. Then I will check the brood nest to make sure that the queen has sufficient room to lay. If the brood nest is full of stores and the queen has no room to lay, I will remove two frames of stores and replace them with two frames of foundation. These will be put on either side of the brood nest. These frames will give the young bees something to do and also give the queen room to lay. At this stage I will be watching to make sure the bees have enough room - they may need a super.

As most of my bees are from swarming stock, if I find in May or June that they have cells made, I will remove the queen and two frames of brood and put them in a new hive on the parent stand and also fill the box with foundation. If there are any supers they will go on this hive.

I will move the other hive to one side of the parent stand, leave one queen cell with good healthy larva and mark this frame with a drawing pin. Five days later I will move it to the other side of the parent stand and also break down any other queen cells that may have developed in the meantime. This will bring all the flying bees back to the queen and these bees should work well. If I'm happy with the new queen when she mates I will replace the old queen with her and unite the two colonies.

Pat Howley. The Four Seasons. Thanks to BEES

IT'S COOL!

(TO BE A BEEKEEPER)

From the Weekend Telegraph - A two page spread by Tessa Boase

A jar of golden, viscous liquid with a handwritten label was positioned carefully in the middle of the dinner-table. It was placed so that it would be noticed: "Sophie's wildflower honey Primrose Hill, 2005"

Sophie, a 34-year-old barrister, clearly wanted to be questioned. She had joined a beekeeping class in north London earlier this year and had actually started beekeeping this spring.

"It's amazing," she said. "I got 38 jars in July and there's more to come." "Wow," said our host. "That's so Cool?" They had to be joking. I am a beekeeper's daughter. For three decades, I have observed the beekeeping world and it has never struck me as a glamorous hobby, beekeeping is a craft that has somehow become both old-fashioned and "unfashionable - it is male, it is middle-aged, it is socially inept. But all this is changing. What is happening now in the British bee world, my 74 year-old father and his cronies wouldn't recognise.

The Hive Honey Shop in Clapham, south London, has taken to marketing its honey with help from a lads' magazine. Blonde Natalie can be found posing in a black lacy

on labels of Kent wildflower honey: "FHM High Street Honey a taste of heaven in jar' (£6.95). The shop owner, James Hamill, 45, says: "I'm trying to dust off the image of beekeeping, to stop people thinking of it as a retirement pursuit and to make it more

accessible."

bra

There are moments when a mood takes hold of society, led not by the media or by marketing men, but by a collective impulse - a hive instinct, if you like. In the Noughties,

we yearn for simpler, gentler activities. We want to get in touch with nature. First, allotments were rediscovered, then it was urban chicken-keeping. Now people are turning to bees.. The radio 4 presenter Martha Carney has a hive. Mick Jagger has one, too, spotted in a bee suit and veil.

Weekend courses run by Hamil are booked months in advance. There's been a major surge of interest," he says, "and it's a really bizarre cross-section - corporate bankers, pilots, music industry executives, accountants and as many women as men. High-powered, stressed, affluent people starting to use beekeeping as their modern day yoga.

All this is good news for the bee. The British Beekeepers' Association reports an all-time high in new applicants and its courses have waiting list (particularly in urban areas), while many large bee suppliers can't keep up with demand and have stopped taking orders for starter nuclei."

When you produce your first jar of honey it's like having a baby. You're so chuffed. Yet honey is a by-product to the new breed of keeper. Their relationship with the bees is the thing. Fiona Robinson, 44, took it up two months ago in her back garden in Merriott, Somerset. "You don't own bees," she says, "you just look after them and give them somewhere to live." Fiona; who physically trains Navy officers, intends to keep the process as "natural" as possible. "So I'm not going to clip the queen's wings to stop her flying off and the hive swarming, "she says. "That's a step too far.

If I have less honey at the end of the summer, then that's what will happen." The old brigade might scoff at this touchy-feely approach, but women are gaining recognition as talented keepers. Bees don't like rough or jerky movements; women have a lighter touch. Bees pick up on their keeper's mood; women tend to be calmer. They are also more tenacious. "They won't take no for an answer," says Michael Badger of the British Beekeepers' Association, who welcomes this new female force.

Don't believe all you see in the papers! Ed.

THE ITALIAN CONNECTION

JENI'S JOTTINGS. OCTOBER 2005.

It's now late October and the Autumn mists and rain arrived in mid month to tell the bees it's time to pack it in this year. So at the moment of writing the countryside is quite splendid, in its various hues of red, yellow, orange and brown. Just a shame it doesn't last a bit longer. The day time temperatures have been quite high for the time of year, which has encouraged the bees out. Not a great deal for them, only ivy and a few meadow flowers, as the frosts haven't really come yet.

OXALIC ACID

The bees have had there first treatment of oxalic acid, a second treatment is recommended, although when we first used this method years ago, Jake did a proper count of the knock down of varroa and found that the first treatment had been successful. the second treatment a month later showed very few varroa. It also depends on the weather too. I spoke to a beekeeper from the Po Valley in the Summer and he treats his bees in January, but the area where he lives is more or less at sea level and a different climate altogether. It's a job I rather dislike as it obviously causes distress and some deaths but there's not a lot of choice. organic or chemical. It would be wonderful if we didn't have to use either.

SPRING CLEAN

I have promised the bees a thorough Spring



clean come what may (And it will probably be May). For two seasons now the Winter has come with a vengeance very late, which hasn't done the bees any favours or me. Italian bees do not fair well with prolonged cold and temperatures of

-12° c and below. It doesn't do for the trees and shrub, many of the less hardy succumb, like the rosemary bushes. Climate change I suppose.

HONEY CROP

Again the main honey crop was early in the season as August turned out to be quite unsettled. I had some help from two of your members. (Julie and Peter) when taking some supers off to extract. I was able to show them the blower which of course they hadn't see before. It's a bit out of keeping with the quiet, (puff of smoke) type of beekeeping but when you have a lot of supers to take off, I think it is a very good method as it doesn't harm the bees. Mind you,! I always did have trouble with clearer boards never working well. Of course a blower is expensive and for a hobbyist would be a bit out of the question.

After putting the wet supers back on the bees, the weather bucked-up so instead of the supers being cleaned out, some of the stocks have stored some more honey. The result of this is to leave the supers on without a queen excluder and see how they fare. They certainly won't go short of food.

SUMMER PROJECT

Apart from the bees and all the usual jobs like hay making, this Summer's project was the demolishing and rebuilding of Percy's shed (Percy is the tractor.) The old shed had been badly damaged by gales last Spring and after a brief discussion with my brother we set to.



I was fortunate in being given some second hand timber and with the help of friends and relatives "Percy' has a very splendid shed which has room for his trailer, plus the spare bee hives and all manner of other things, and is much more in keeping with the surroundings.

SNAKES ALIVE!

Another happening of note was the capturing of a fairly large snake, who had fancied new born chicks for dinner but fortunately had bumped into a rat who had the same idea. When spotted it was constricting and trying to eat the rat so was quite easy to get into a bucket with a lid. Problem was what to



do with it, as luck would have it a biologist spends his Summer holidays in the village and his pet subject is snakes.

So, having been summoned, over the back fence, he came and pronounced it a rare and protected European Boa Constrictor and should be let go, a long way away. "Fine" I said," but where is best for this snake", so he left off what he was doing and took my brother still holding the bucket to a ophiolite out crop a few miles away. (Ophiolite is a black rock and is known as devils rock). Where they let the snake go and threw its dinner, the rat, after it.

A happy ending as many snakes just end up dead because people are frightened of them. Hoping that you have all had a good season, and best wishes for the next. Tante salute Jeni

CHINESE PROVERB (2)

If you are planning for a (
year, sow rice. If you are (
planning for a lifetime, (
) educate people

EMAIL FROM THAILAND

We set of to Thailand on the 2nd of November from Manchester, Via Heathrow and then on to Bangkok. At the transfer desk in London we had to wait for half and hour and thought there were problems, which turned out to be that the airline had overbook seats and ours had been taken

Luck was on our side as we were upgraded from business to first class which was marvellous. Talk about being pampered - it was the bees knees. The flight was good, and so it should have been for the £2,500 it would have cost, had we had to pay for it. The only drawback was that the suitcases were lost in London and took until the next day to arrive.

The house was just as we had left it as my next door neighbour had been in once a week to keep the place spick and span. It took me a week more or less to wind down from all the work etc. from the UK. But I am finally there, all Jai Yen (cool heart).

Weather wise its been not too good, warm, 36°c everyday with lots of rain, my Buddha its rained! The main areas have been totally flooded out 3 times and the locals are getting fed up with it all. I think I would to if I had a 2ft. deep river running past my house which a minute ago was the road. Our place is built up so we are lucky but a lot of the people are not so lucky. At least its warm rain.

We will be moving up country in the next week or so, up to one of the big national parks and will maybe spend a couple of weeks in the jungle. Saying that, we went to a house blessing ceremony the other day in a place called Nakon Sawan and that was really wild. There was a large lake at the back of the house and it was home to a few crocodiles. I was going to go for a swim but thought twice about it.

Nothing really bee related in this location as all the serious beekeeping is up North in the Golden Triangle. Its great beekeeping country there, opium growing territory too. We will be going up there after Christmas, so will let you know how things are there.

I will send you another Email soon. Michael and Sai

THE EFFECTS OF POLLEN AVAILABILITY

....ON THE QUALITY AND QUANTITY OF WORKERS PRODUCED IN SPRING

by H. R. Matula and G. W. Otis, Dept of Environmental Biology, University of Guelph, Ontario, Canada, NIG 2WI

BROOD REARING

Colony growth in spring is dependent on the ability of an over-wintering colony to initiate mid-winter brood rearing with pollen and protein stores)Seeley and Visscher, Ecol. Entomol. 10: 81-88)

PROTEIN STRESSED

Colonies can become protein stressed if the protein reserves are depleted before adequate foraging conditions exist. We examined the effects of pollen availability on the quality and quantity of brood reared by colonies in the spring. Pollen stores were manipulated by trapping pollen in the autumn (low pollen), feeding pollen patties in the late winter (high pollen) or left unmanipulated (control).

TAGGED WORKERS

Sealed brood measurements were made on colonies from mid-March to late April. Three times in April, newly emerged workers were



collected from colonies, if available. Some workers were tagged and introduced into a common observation hive to determine differences in behaviour and longevity between treatments, while others were measured for size, symmetry and protein content.

FOREWINGS

Pollen-fed colonies reared significantly more brood than control or low pollen colonies. Worker size, protein content and symmetry were not affected by pollen availability at any sampling date, except tor forewings. which increased in size over time for control and low pollen colonies but remained constant for high pollen colonies.

LONGER LIFE

Longevity was significantly greater for workers reared in high pollen colonies compared to low pollen and control colonies. A two-week difference in longevity between high and low pollen treatments was found even though workers spent their adult life in the same observation hive.

INCREASED WORKFORCE

This increase in workforce translated to significant increases in honey production in the source colonies by mid-summer where high pollen colonies produced twice as much honey than low pollen colonies.

The results indicate that protein stressed colonies compromise both quantity and quality of brood. No differences in behaviour were found between bees from each treatment to 10 days of age, but our data suggests that bees reared under high pollen conditions may spend more time performing in-hive duties at the age when control bees became foragers (20 days).

This article appeared in Beekeeping and is reproduced with their permission and also with thanks to BEES

LAND MINES

Honeybees can be trained to locate landmines with an accuracy of better than 97.5%. Tracking them with laser-based radar could provide a fast and effective means of clearing the world's minefields.

CHILDREN

Landmines kill and maim tens of thousands civilians a year, 30-40% of whom are children.

Moreover, although it costs only a few dollars to lay a landmine, it can cost m a n y hundreds of dollars to find and remove it.



Faster and cheaper methods for

clearing minefields are desperately needed.

Writing in Optics Express, Joseph Shaw and colleagues report progress in the use of Lidar, a detection and ranging technique similar to radar that uses laser light instead of radio waves to locate the position of honeybees that have been trained to find explosives buried in a minefield.

USING HONEY BEES

Landmines leak trace amounts of explosive chemicals into the soil and air around them. The ability of sniffer-dogs to distinguish such chemical signatures at concentrations down to one part per trillion and below, provides one means of locating buried mines.

But it's costly and time-consuming to train the dogs, and their potential to inadvertently trigger a mine while conducting a search puts them and their handlers at significant risk. In contrast, recent work by the same group suggests that honeybees, which posses a similarly sensitive sense of smell to that of dogs, could be just as effective at locating mines, but at lower cost, in greater number, and with minimal danger.

SCENT

Honeybees can be trained to seek out a given chemical by adding it to their syrup feed. This encourages the bees to form an association between the scent of the chemical and a source of food, which in turn causes them to fly towards and around any source of that chemical that they find in their natural foraging behaviour. To take advantage of the bees' mine finding talent,

it is vital to be able to locate them remotely.

TRACKING

To track the movement of bees over a minefield, Shaw and colleagues have developed a scanning Lidar system based on one that had previously been designed to locate fish.

LASERS

The authors' system consists of a pulsed laser mounted beside a photomultiplier tube, both of which

are scanned horizontally back and forth across the field in question. Individual bees are located by synchronizing the detection of scattered light with the timing of the emitted laser pulses and the position of the scanned beam. By detecting where many bees congregate over time, Shaw et al. are able to map the location of active (but unfused) mines in a 4424m field at a distance of 83m.

CHINESE PROVERB (3)
One cannot refuse to eat just because there is a chance of being choked

DISCLAIMER

The views expressed in any of the articles in 'Bee Talk' represent the personal opinions of the contributors and in no way should they be regarded as the official opinions or views of the 'Lancashire & North West Beekeepers Association' nor of our local Branch of this association 'The Blackburn & East Lancashire Branch'

LOW SPERM COUNT

The latest buzz from the honey industry is not good - many of Australia's supposedly virile bees are suffering low sperm counts. John Rhodes knows this after four years using a microscope and syringe to extract semen from thousands of bees.

NOT FREE LOVE

The researcher from the Department of Primary Industries plans to spend the next few years counting the sperm of thousands more bees to work out where the problem comes from, though he suspects it is inherited in certain lines of bees, and the problem is not the result of free love it has been a long time since professional apiarists let their queens fool around. Artificial insemination using selected queens and drones has been going on since the 1940s to produce bees that are easy to handle, are disease resistant and prolific breeders so there are plenty of worker bees

FIRING BLANKS

Australia is so highly regarded for its bees that it has become a major exporter of impregnated queens. But Mr.Rhodes said his discovery that some breeding lines are firing a lot of blanks show "we need to take more care in selecting breeding stock. Some breeding lines are falling well below what we want. Preliminary data shows that the average volumes and sperm numbers produced by drones in the experiment are substantially below acceptable levels when compared with overseas results".

AUSTRALIAN QUEENS

Mr.Rhodes' findings came about because of his research into queens sparked by nagging problems" over decades that beekeepers have had with the survival rate of the queens that they were buying from breeders. Col Wilson, President of the Queen Bee Breeders Association, also spends a lot of time extracting sperm from drones and impregnating queens at his Kurri Kurri property in the Hunter Valley. He has many lines of bees and agrees some of them have low sperm counts. Despite that, Mr.Wilson said his overseas clients said that "queens from' Australia' perform better than stock they get from other places.

NEGATIVES

There is likely, to be a trade off somewhere when breeders try to get qualities they want. Some breeders only see the possible positive side of the equation and don't even consider possible negatives. Do we know what questions on the negative side even to ask and hence how to monitor them? Perhaps there are rather more dangers with selective breeding than are appreciated.

From an article in an Australian paper Reproduced from the Cheshire Beekeeper Courtesy of BEES

ANIMAL MAGIC WEEKEND.

Wildfowl & Wetlands Centre. Martin Mere. Sept. 24th / 25th.

An unexpected invitation from the above mentioned establishment, asked our Club to present something suitable on beekeeping on that weekend. Throughout the weekend I was unable to find out why us, when there were other Clubs much closer to the venue.

It turned out to be a most interesting event with plenty to see and get involved in. There was a great deal of enthusiasm, even without a display of live bees, especially from parents, more so than children. This I think was the reluctance of kids to ask questions. A factor that constantly arose was the built in fear of bees, probably coupled to the fact that there was some misunderstanding between what was a honey bee, a wasp and a bumble-bee.

The range of exhibits covered ranged from bats, ferrets, birds of prey, otters and a whole range of creepy crawlies kept as pets. I.e. snakes, spiders and even a beautifully coloured iguana.

The one down side was that the exhibit rooms were sited a distance from the entrance so most people only arrived on their way out having already walked a considerable distance around grounds.

Brian and Margaret Jackson



THE HIVE

Where hives are concerned, the requirements of bees and beekeeper do not entirely coincide; indeed, of the two, the beekeeper is the fussier. Bees certainly thrive in all the hives we currently care to keep them in. Research shows that swarms prefer a cavity of about 40 litres (a little larger than a Modified National brood box), well up off the ground, with a small entrance. This is essentially a space with room enough for a cluster and winter stores, which can be easily defended.

QUEEN EXCLUDER

Needless to say a wide range is tolerated. Instead of a fixed cavity, the size of a modern hive is variable. It is split in two parts by the queen excluder which restricts the queen and hence the brood to the lower part, and the honey stores for removal to the top. Boxes can be added as necessary to suit the size of the colony. Normally only one brood box is used with any number of supers as the season and flow require. Arithmetic based on the peak laying rate of the queen alone will not decide the size of brood box. A much better guide will be local experience and advice.

AVOID ECCENTRICS

Ask the beekeepers what works in the neighbourhood, and avoid the eccentric. A brood box that is too small will restrict the laying of the queen and the colony will not build up to its potential. On the other hand, putting a type of bee that maintains only a moderate population into a very large hive will not encourage it to expand its brood area, but will only ensure that a large part of the honey crop is stored in the brood frames where it is removable only with difficulty.

So far the question of hive choice has been confined to the requirements of the inhabitants. Now the much more demanding needs of the beekeeper have to be considered, such as the area, cost, looks, the beekeeper's strength, and future plans. I shall recommend now for the novice the adoption of the Modified National on the grounds that it is common, readily available, cheapish and straightforward. This is not to denigrate any other type - they all have their pros and cons - and their persuasive advocates!

SPACING FRAMES

To my knowledge, there are only two types of frames as far as spacing is concerned. Self spacing (Hoffman) and ordinary Non self spacing. Most people use self spacing, although they are slightly dearer. The only other down side I can think of is, they take a lot of room up in storage. If you have been lumbered with a lot of non spacing frames, Your options are, metal ends, the metal bits (now made in plastic) that are pushed over the end of the frame. Castellated spacers are nailed to the inside top of the box. The frames can then be dropped down into the castellations. Yorkshire spacers (not much used in our part of the country) These are fastened to the side bar just under the top bar and can be fastened to the bottom of the side bar as well if the hives are to be moved about a lot (Pollination, heather, rape). They stop the frames swinging about if the hive is roughly used.

If on the other hand you have the pleasure of starting, with a choice. As our Prime Minister would say Hoffman! Hoffman! and Hoffman! Spacing can be achieved using nails, staples and boot studs. All of which I have come across and used myself from time to time. Not very successfuly I must add. There is finger spacing too. Only to be used in supers and on hives that are not to be moved. This involves putting the correct amount of frames in a super which has been placed on a hive, and simply space them with your fingers. It works well.

LETTER FROM BRIDGET

Dear Friends,

Finally we can communicate with the outside world!

In case we haven't been able to tell you before, we have moved to live in France at:

Tuque de Marot Lavergne Miramont de Guyenne 47800 Lot et Garonne France tel: +33(0)553 79 64 91 Email: Bridget.Beattie@wanadoo.fr

Hi Bill,

The journey here was not without incident!

I decided to bring a nuc with me, just so that I'm not bee-less altogether in the Spring, and got all the proper inspections and permissions OK. This is what happened::

BEES IN THE CAR

John flew over here to meet the removal van on 27th September, leaving me to clear up the mess at home, which took me a week and then I hadn't finished. Still, finally left the UK with the car loaded down to its axles with lots of things which missed the van, and including the nuc in the foot well of the passenger seat.

ACCIDENT

I hadn't gone 5 miles down the motorway, (2 hours later than planned), to catch the ferry to France at midnight, when the vehicle in front shed a box of plastic components which bounced off the road and hit my windscreen full on. I was already, at this stage, bawling my eyes out so it served to put things in proper perspective, as the box broke up and my windscreen didn't! I couldn't get out of the car as there was fast-moving traffic on my side and the other side was blocked by the nucleus.

The policeman who stopped to help was very good and allowed me to continue, I did catch the ferry, 250 miles later, and so to France.

COOLING THE BEES

At 6 am after a good sleep on the ship, we - I and my several thousand girls - assumed the right-hand lane of the carriageway and drove all day in bright sunshine at 30 degrees! This was a good omen, although I had to spray the bees periodically with water to keep them from overheating. Having made great time, I finally got lost around Angouleme as it was getting dark, so I stopped at an inn for the night and arrived here the next morning. Phew!

SMOTHERED

On arrival I found that the bee equipment which had come on the removal van was smothered in bees - obviously there are hives around. Our farmer neighbour has promised me a colony from a tree on his land and with the room we have here, I'm looking forward to getting the bees going again. There are many acacia trees around so my honey will change its character....

FRENCH WAY OF LIFE

The house is mostly renovated, a typical regional farmhouse/barn with 2.5 acres and a superb view. It's sunny even though it's turned cold now in November, and we love the French way of life.

We will go to Montserrat for the winter as usual but probably not until the end of November.

Best wishes, Bridget

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

HOW TO GROW A HERB TOWER

A WONDERFUL ADDITION TO YOUR GARDEN AND KITCHEN, HERBS ARE NOT ONLY DELICIOUS BUT ARE ALSO EASY TO GROW!

1. GATHER MATERIALS



Gather the following supplies: one 8" glazed pot with saucer; two 6" pots: 1 glazed, 1 clay; two 4" pots: 1 glazed, 1 clay; Potting Compost and herbs.

3. STACK 'EM



Place and level the 6" glazed pot on top of upside down 6" clay pot. Invert the 4" clay pot inside the glazed pot. Fill in remaining space with soil and 4 more herbs.

2. PLANT 'EM



Place one 6" clay pot upside down in the 8" glazed pot. Fill in remaining space inside the glazed pot with soil and 6 herbs.

4. WATER 'EM



Place and level the 4" glazed pot on top, fill with soil and last herb plant. Water each level. Keep moist, not soggy.

The herbs should be ready for picking within a few weeks. Feed with liquid fertilizer every fortnight. Turn every week to give all the plants the advantage of sun. Do not over pick or the herbs will die. The herbs we used were one chive, one purple sage any one marjoram on top with two thyme, one variegated mint and two parsley round the edge. You can have any favourite combination you wish but keep the larger herbs on top. It might be wise to keep the tower out of reach of any dogs!

ARTIFICIAL SWARMING WITHOUT FINDING THE QUEEN.

Move the parent stock with the queen cells to one side. In its place put a floor, queen excluder and a brood box with a frame feeder full of syrup. Have frames of foundation and a second queen excluder ready to add after we have shaken bees into the brood box..

Shake and brush all the bees from the parent stock into this new hive. The shaken frames should then be placed into another clean brood box in the order that they were removed from the parent stock, at the same time destroying ALL the queen cells as you go, WITH THE EXCEPTION of two good looking unsealed cells that we are going to use to raise into queens. If we can select two cells on two separate frames, so much the better.

Now rebuild the hive. On top of the new swarm fit the second queen excluder, then the supers and the box containing the frames of brood from the parent stock. Including the two queen cells, feeder with syrup, cover and roof.

The nurse bees will go up to the brood within minutes. We have food for the bees in the top and bottom boxes.

In *four to six days time* move the queen excluder, super and parent stock to one side. Go through the swarm to see if we can find the queen or signs of a queen (eggs) If we do then remove the queen excluder we placed between the floor and the brood box.

Rebuild the hive, destroying one of the queen cells left in the parent stock, and all new queen cells raised in the last four to six days. The parent stock can now be separated from the swarm, with a ventilated board (Horsely board or Curry board) or moved to some other part of the apiary as another stock. Keep feeding both swarm and parent.

If no queen or eggs are found in the swarm, then take one of the queen cells from the parent stock and give to the swarm. Destroy all queen cells in the parent stock.

The parent stock can now be separated. Bill Ainsworth

P.S. One of our Holden Clough managers, Paul Aldred, would tell us, that now is a golden opportunity to have a go at the varroa that must surely be there. Give the shook swarm a good dusting with icing sugar after shaking them down into the bottom of the new box. As the bees get rid of the sugar they also get rid of the mites.

EMAIL FROM NEW ZEALAND

Hi Bill.

I was just browsing through the latest 'Bee Talk' and saw your article about invert sugar and thought "I've seen a recipe somewhere!".

Well, I took a look and found one in my Beekeeping in N.Z. notes from last year.

INVERTED SUGAR RECIPE.

Sugar 25lbs

Tartaric Acid 1/2 ounce (avoidupois)
Water 1 gallon

Bring ingredients to boil and keep at that temperature for 1/2 to 3/4hr. Allow to cool, It is likely to be a yellowish colour. I have heard that tartaric acid can be substituted by oxalic acid, but not whether the amounts are the same, this doesn't discolour the sugar though. Hope this will be of some use.

Give my best to the gang. Remember me, on Monday morning (N.Z. time) at 05.00 I will be setting off to get 600 hives ready for kiwi fruit pollination at Te Puke in the Bay of Plenty. *Regards, David Rainer.*

FOR ALL YOUR BEEKEEPING SUPPLIES Contact

Judith David

agent for

Thornes Beekeeping Equipment Hoarstones, Fence BURNLEY BB1 2 9EA 'phone 01282 693330

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HONEY BEE GENETICS. PART ONE APIS ILK.

In this article we take a look at basic, easy to read and understand honey bee genetics. The problem with genetics and Mendel and peas and all those diagrams rapidly multiplying themselves is that they are very much like insurance policies. When an insurance agent explains them they are obvious. Ten minutes after he is out of the



Insurance salesman to housewife "Suppose your husband were to die, what would you get?"

Housewife "Oh, a parrot, I think. Then the house wouldn't seem so quiet."

door, one is in a complete fog regarding the situation, frantically looking around for a beer and wondering what on earth you've just spent your money on. However, even a basic understanding of the situation can help you look at your bees in another light and you may even be able to improve them. You will certainly be able to discover what your local queen supplier is up to and whether he or she is really up to it. It will also become obvious to you why bees have arranged things the way they have.

The big thing about bees is that drone bees come from an unfertilised egg and this one fact makes bee genetics very different and as long as you remember this, the rest of bee genetics becomes easier to understand.

Chromosomes contain the genes that make us what we are. Humans have two sets of chromosomes, 46 chromosomes in total. 23 from the female egg and 23 from the male sperm. Queens and worker bees have 32 chromosomes, again two sets, 16 from the queens egg and 16 from the drone's sperm. They are diploid. Di means two (sets) and ploid means chromosome.

Drones which result from an unfertilised egg have 16 chromosomes only because they receive only the 16 chromosomes from the queen's egg. They are called haploid. One (set) chromosome.

When a queen mates with a drone she will produce eggs. As in humans and most other animals, each egg will contain half her total chromosomes, in the case of a bee this is 16. This means that like a human mother she can only ever pass on to her offspring 50% of her genes. This egg will contain a random selection of her genes.

The drone will contribute the other 16 chromosomes which are 100% of his total genes. So each sperm from a drone is identical, i.e. clones. A resulting worker or gueen therefore will receive 50% of her mother's genes and 100% of her father's genes. A sister worker or gueen from the same drone and gueen will therefore have a 75% relationship. These sisters are called supersisters and comprise definite groupings within a hive. In humans and other animals your offspring will only have a 50% relationship. 50% from the mother's genes and 50% from the father's genes. If a worker had her own offspring, she too would only have this 50% relationship with her offspring. By helping the queen raise her supersisters she has raised this relationship to 75%. There is a principle in biology that an organism will tend to do whatever most efficiently gets more of its genes into the next generation and by operating in this fashion, bees have worked out a very efficient system for doing this.

Queens will mate with many drones, possibly up to twenty. The reason for this is probably to gather up a wide genetic diversity for the colony and to reduce the possibility of inbreeding. This means that there can be many different families of supersisters in the hive, each with the same mother but a different father. A worker in the same family will have a relationship to a sister of 75% and to a sister from the same mother but a different father of 25%. This difference in relationship has many effects on the life and work of the colony and we will look at this and other aspects in future articles.

THE HONEY SHOW 2005

Once again our heartfelt thanks go out to John Zamorski for getting permission for us to have Castle Cement as our venue. Our Judge was Mr. Bernard Diaper who came all the way from Sutton Coalfield and he was amazed with the facilities awarded to us completely free of charge. Our Guest Judge was Mrs. Angela Barrett who with her husband David have been loyal supporters for many years. This year we eschewed our usual style of judging and had an open session.

There were 68 exhibits from I7 entrants.

The results of the Show are as follows:

CLASS

1	Light	Mr D. Barrett
2	Medium / Dark	Mr. D. Bush
3	Heather	Mr. M. Birt
4	Soft /granulated	Mr. P. Aldred
5	Novices	Mr. B. Jackson
6	Frame of honey	Mr. D. Barrett
7	Cake of bees wax	Mr. K. Gaiger
8	Honey cake	Mr. K Gaiger
9	Honey Fudge	Mr. B. Jackson
10	Honey Dessert	Mr. B. Jackson
11	Mead	Mr. D. Barrett
12	Photographic print	Mrs. L. Yates
13	Waxed craft	Mr. J. Zamorsk

The Challenge Cup was awarded to Mr. D. Barrett for the most points in the Show.

The Best Exhibit for the Ken Preedy Memorial Cup was for the frame of honey exhibited by Mr. D. Barrett

On your behalf I would like to thank all the Exhibitors for the effort put into showing and their obvious enthusiasm.

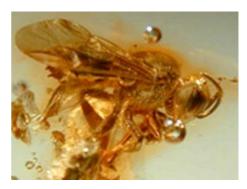
Can I mention especially Mrs. Lynne Zamorski who year after year puts tremendous efforts into preparing refreshments for us all to enjoy and to anyone else who helped the Show to run smoothly.

Thanks also go to Mrs. Barrett for being such a capable and good Judge in what is a very difficult area.

SURVIVAL

By David J. Webb©

Several years ago, the perfectly preserved body of a bee, encased in amber, was found, It was carbon-dated to be at least 80 million years old. The little bee, was probably caught in a glob of tree sap while out on a mission of gathering the sticky fluid for the production of propolis.



The oldest continuously living species on earth has not survived all extinct earth dwellers' by accident The honey-bee is the embodiment of efficiency and ingenuity. Efficiency, in having the most effective social and production-oriented society ever known, and ingenuity in having the most masterful research and development program ever conceived.

Woolly mammoths died out, dinosaurs disappeared, but the bee has outlasted them all, and continues to flourish today even stronger than ever.

For over 80 million years the bee has been attacked by all variations of threats from viruses, fungi, bacteria and a host of little and large pests. Nothing has been able to interrupt the bee's survival plans.

Man and other animals, have harvested the products of the beehive, for their pleasure and very survival. The fact that bees have existed continuously for over 80 million years, tells us that whatever they are doing..... works! There's a lesson in this experience, one that should be taken seriously.

The most amazing little creature on this great earth of ours is the bee.



BEE - NOTICES



SCHEDULE OF VISITS TO HOLDEN CLOUGH DURING 2006

It is intended to visit the apiary every Sunday morning starting 30th APRIL until the 24th AUGUST 2006

PLEASE RING ONE OF THE APIARY MANAGERS IF YOU WISH TO ATTEND TO MAKE SURE THE VISIT IS AS SCHEDULED. WHICH WILL BE SUBJECT TO THE WEATHER.

STARTING TIME APPROX. 9.30am

APIARY MANAGERS

David Rayner 01200 426898 Paul Aldred 01772 330159

MEMBERS SERVICES

Bayvoral £3. per pack of 4 strips Thymol crystals £2.20 per 100 g Beekeepers quarterly Annual subscription from the publisher is £24 from our treasurer only £16.00 with a slight profit to our society.

The publication has just been expanded to include another publication Beebiz'. Talk to Ken Gaiger phone. 01282 778887.

Library. There is an extensive range of bee books etc. that may be borrowed.

Our librarian, Brian Jackson brings some with him to our meetings. Contact him on 01535 634503 for special requests.

CHINESE PROVERB (4)

A buffalo does not have a sting in its tail, but a wise man would still rather be sat on by a bee

FROM THE TREASURER

Subscriptions for the 2006 season are now due. The new full membership rate will be unchanged, at £14 and £2 for each additional family member. Associate membership is £4.00. This has been achieved even though out goings are increasing.

The rates for Bee Disease Insurance (B.D.I.) Are:-

First 3 hives are covered by subscription

up to 5 hives up to 10 hives up to 15 hives up to 20 hives up to 25 hives 42,00extra £5.25extra £7 75extra £9.50extra £11.10 extra Above 25 hives See Treasurer

Please forward your subscriptions whilst its fresh in your mind, it will save me a lot of trouble. Also early renewal is necessary to assure you have the public liability (third party) insurance which is included in your subscription

Annual subscriptions to THE BEEKEEPER are almost due so payment of £16 would be appreciated.

CHEQUES SHOULD BE MADE PAYABLE To L. & N.W.B.K.A. AND SENT TO KEN GAIGER, 2 HIGHAM ROAD, PADIHAM, BURNLEY BB12 9AP

Telephone 01282 778887

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BEE - NOTICES



INFORMATION ABOUT 'BEFTALK'

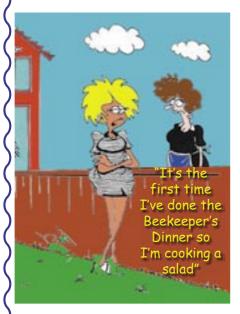
Planned Publication Dates: March 2006, June 2006, September 2006, December 2006 LATEST TIME FOR COPY - 2 WEEKS BEFORE THE MONTH OF PUBLICATION.

Please contact Bill Ainsworth, 296 Scotland Road Nelson BB9 7YS Telephone 01282 614015 . Good, crisp photographs or line drawings are always welcome

ANNUAL DINNER

The menu hasn't been fixed for our Annual Dinner but we can

promise it wont be just salad.



The Date is Wednesday 29th Warch 2006 and the venue is the Hillcrest Tea Rooms in Witton.

Please make a note in your Diary, it's always a 'first Class Do'.

The restaurant is under new management and they seem very keen. They are now licensed so you son't have to 'bring your own'.

Please ring John Zamorski now to reserve your places. Le will contact you later with the menu and other Setails.

TAKE NOTE.

The rates for Bee Disease Insurance (B.D.I.) have been increased and the new amounts are shown on Page 18.

The new insurance fee should be included when you pay your subscription which WAS due as from the AGM in November. Your third party liability insurance is a part of your subscription. PLEASE NOTE you are not covered until your subscription is paid



A STORY FOR CHRISTMAS

Some years ago I was asked to give a beekeeping demonstration at he Pendle Heritage Centre in Barrowford. I cannot properly recall what the event was about , it was some Saints day in Autumn just before Christmas and was a really big event. There were many small organizations doing their demonstrations over a weekend. It was mainly craft work, and the whole affair was well organised and well attended.

BREAD . .

There were two demonstrations that I managed to find time to look at (they were both involving food, one of my special interests). Pendle Heritage Centre is situated in a lovely 16th century house, that has connections with our own Jack Armistead, he lived there as a boy. On the ground floor there is an old fashioned fireplace with a side oven and boiler. A perfect place for a demonstration of baking, that was performed by two apprentices from" Oddies" a local craft bakers. The apprentices were demonstrating bread making from beginning to end, using the side oven heated by a coal fire. The smell of the baking filled the who house.

.. AND BUTTER

At the same time the manager from West Marton Diaries was churning Butter outside in the yard. With lots of water and buckets of milk, or was it cream? He was using an old wooden butter churn ,it was a slow job but the looks and the smell was something to write home about. I could stand it no longer. A slice of newly baked bread done in the side oven spread with the newly churned butter done right there and then in the yard. Then upstairs for a pot of my own honey from the demo. Every one was in full agreement it was indeed "Food fit for the Gods".

FIGHTING TALK

The Greek soldier Xenophon (born 430 BC) reports that while Greek soldiers were looting villages near Trapezus, Turkey, they "found" some honeybee hives. After the soldiers had stolen and eaten the honey, they lost their senses and were stricken with vomiting and purging.

Swarms of bees can be induced to settle into large clay jars called amphorae. These sturdy beehives were loaded into catapults by the Romans and launched into walled fortresses or into massed troops.



In the 11th Century, Irnmo, general of Emperor Henry I, threw beehives from cliffs onto the attacking troops of Geiselbert. Duke of Lorraine. The citizens of Gussing, Hungary used the same technique in 1289 against the troops of Albert, Duke of Austria. In 1642, during the Thirty Years War, a beekeeper in Kissengen, Germany named Peter Heil threw his skeps among the horses of the attacking Swedish army under the command of General Reichwald, stopping a siege of the city



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BILL HAS BEES FOR SALE - PERHAPS!

Providing we have a reasonable Winter and a good early Spring. If I'm still here; if my arthritic knees don't stop beekeeping; me if the Gods smile on me and if I can remember what I'm doing. Then I MIGHT have some full stocks of bees for sale sometime in the Spring.



If you think you might be interested, give me a ring on 01282 614015 about March and we'll see what we can do.