

Bee Talk

Newsletter of The Blackburn and East Lancashire Branch of The Lancashire & North West Beekeepers Association http://www.kimberim.freeserve.co.uk

Vol. 7 No. 3 July 2001 Registered Charity

| What's in this | mo | nth's Beetalk | |
|---|--------------------|--|-------------------------|
| Editorial Foot and Mouth and Bill nearly foot in it with John. | Page 1 y puts his | A present for the Teacher William's Dad makes Mead | Page 6 |
| | | Bridget feels exhausted | Page 7 |
| Sugar and Honey | Page 2 | Update on Montserrat | |
| What is in a jar of honey and wh | y it's bet- | | |
| ter than sugar | | Choosing Bees Albert Knight looks at German | Page 8 |
| Biological Control of Varroa Fungi an Scorpions | Page 3 | and Ireland | |
| | | Why Study Honey Bees? | |
| We had One of Those | Page 3 | Comcluding last | |
| It's old, it's iron but what on earth is it? | | months article | Page 9. |
| | | The Open Day | Page 10 |
| Portrait of a Beekeeper Our very own Angela owns up! | Page 4 | John Zamorski reports | |
| | | Having a herat attack | Page 10 |
| A High Tech Editor Modern Technology and the | Page 4 | What to do if you're on your o | wn |
| beekeepers ancient craft | | Scrapings Bits and pieces from the bottom | Page 11 <i>n</i> |
| The Italian Connection Snakes alive from Jake and Jeni | Page 5 | of the hive. | |
| Ü | | Notices | Page 12 |
| The Right Time When to add supers | Page 6 | Information just for you | 0 |
| | | | |



Editorial July 2001

SWARM CHASING

Swarm chasing is almost becoming a full time job, unfortunately collecting swarms of bees is but a small part of it. What with bees in chimneys, bumble bees, insects of all kinds on Cotoneaster plants (five call outs so far this year to this situation) it's getting beyond a joke.

THANK YOU JOE

Foot and mouth has prevented any one of us going to Holden Clough so far this year and it doesn't look like we will be permitted there until foot and mouth has been eradicated from the County altogether. However Joe is looking after the few stocks we have over there, so apart from losing a full year of our bee development programme, there is no great loss. At my age a year missing is something one cannot afford, especially if we are considering bee breeding programmes, which, I can assure you, are very long winded indeed.

The Holden Clough bees that were brought over to Barrowford as unsatisfactory and left to be re-queened, have turned out to be wonderfully quiet, a joy to work with and also look likely to produce some honey.

MITE COUNT

Thymol works, after reporting in our last issue that I had found varroa in my hives, I applied thymol in tea bags as recommended. I have now completed eleven weekly counts of mite drop onto the varroa inserts and have come to the definite conclusion that it works.

I can now leave the use of hard chemicals (Bayvarol strips) in the hives, until after removing the honey supers. This way I don't get Bayvarol in my honey and I give the varroa a real good hammering before settling the colonies down for the winter.

MEETINGS

We seem to be getting lower attendances at meetings. Bill Kitchingman's talk on mead making at Samlesbury Brewery in March was reasonable well attended and much enjoyed (he can make some very good booze).

FOOT AND MOUTH

The April meeting should have been at Holden Clough but Foot &Mouth made us change venue and go to Clitheroe Cement Works where Keith Wilkinson and Ken Gaiger showed us the Snelgrove board, a rather complicated piece of equipment - well the equipment is simple enough it is the working of it which is complicated. Never the less it was a wonderful, professional presentation and the attendance was not to bad.

The May meeting at Brian Jackson's slipped behind in attendance and lower House Farm is a beautiful venue we were well looked after and the meeting was a fun information affair.

TOWNELEY HALL

At Towneley Hall, the meeting with John Zamorski was a success. I was too busy 'nattering' to notice how many members were present but I don't think there were very many. The public attended in good numbers but my concern is the attendance by members. Lets do better next year.

NO OFFENCE INTENDED

I'm glad John Zamorski did not take offence at my rough remarks at Townely Hall (see page 10). But truly this exhibition is far too much work for one or two people to do, The whole association should be involved, and just to make up for suggesting "It wasn't done right" I will here and now volunteer to help next year.

THE COMPOSITION OF HONEY

Honey is composed mainly of a variety of sugars, traces of pollen and water. There are also enzymes present. The following is from 490 samples of largely uncrystalized honeys...

| Moisture(%) | 17.2 |
|-------------------|-------|
| Levulose(%) | 38.19 |
| Dextrose(%) | 31.28 |
| Sucrose(%) | 1.31 |
| Maltose(%) | 7.31 |
| Higher sugars(%) | 1.50 |
| Undetermined(%) | 3.1 |
| pН | 3.91 |
| Free Acidity | 22.03 |
| Lactone | 7.11 |
| total Acidity | 29.12 |
| Lactone/Free Acid | 0.335 |
| Ash(%) | 0.169 |
| Nitrogen(%) | 0.041 |
| Diastase | 20.8 |

Because the sugars in Honey depend upon a carrier to move them across the membrane barrier, they are limited by how much carrier is available. This means that there is less of a "rush" of sugar to the body with honey i.e. ...

- Less of a strain on the pancreas to suddenly produce large amounts of insulin...
- -* Less likelihood of large peaks and valleys in the insulin /sugar curve...
- Less likelihood of hypoglycemia

The main practical difference in behavior between that of sucrose and the complex sugars in honey is the manner in which the body absorbs them. Sucrose is absorbed via osmosis. This means that it simply enters the bloodstream, penetrating directly through membranes, when it is being digested.

The implication is that large amounts of sugar can rapidly enter the system. This rapid entry can cause an over-reaction of insulin production by the pancreas, resulting in the quick burning of the sugar in the system. A crash back to lower levels of sugar (caused by the over-stimulation of insulin production/rapid digestion of sugar) may occur.

The complex sugars contained in honey are absorbed by a process known as "active transport." While the term "active" may seem denote that this should occur quickly, the opposite is true... since the transport of the sugars through membranes and into the bloodstream is accomplished by an actual carrying agent (a chemical that binds the sugar), the speed with which it is absorbed is regulated by the availability of the transport agent. So complex sugars move into

the bloodstream at a slower rate and are, therefore, less likely to cause an over-stimulation of insulin production.

Add to this the fact that honey is twice as sweet as sugar, you can use half as much in a given recipe, and you can see that diabetics are far less likely to shock themselves with honey as a sweetening agent than sugar.

From a lecture given By Dr. James Carpenter, University of Hawaii at Hilo, Nutrition Class.

Committee Members Approved at the AGM FOR THE YEAR 2001 <u>Contact Details</u>

| Michael Birt | Chair | 01254 814088 | David Bush | Member | 01200 428152 |
|-----------------|----------------|--------------|-----------------|--------|--------------|
| Bill Ainsworth | Vice Chair | 01282 614015 | John Holland | Member | 01254 670498 |
| Angela Moyle | Hon. Secretary | 01200 445398 | Barry Mellers | Member | 01282 612985 |
| Ken Gaiger | Hon. Treasurer | 01282 778887 | Keith Wilkinson | Member | 01254 812425 |
| Pauline Roberts | Honey Show Sec | 01282 438615 | Joe Wrigley | Member | 01200 447621 |
| John Zamorski | Librarian | 01200 427661 | <i>U</i> , | | |

BIOLOGICAL CONTROL OF VARROA

Because Varroa is found on the exterior of adult honeybees, it is vulnerable to direct attack. One line of research is being conducted at the Rothamstead bee research facility of the United Kingdom's Institute of Arable Crops Research (IACR).

NATURAL ENEMIES

Fungi are the most promising natural enemies of Varroa, according to Katie Shaw "At least 13 mercial fungal ucts have prod-

already been for specific pests in ricultural systems, formulations that the target".

A specific fungus makes Varroa sick. athopoulos, B. Ru-Canada. Their pa-Varroa Sick?" ap-(November 2000, organ of the Canawww.honeycoun-

developed horticultural and agconsisting of spore are applied directly to

has been found that according to A. Melzicka and J. Gates in per, "Can You Make pears in HiveLights pp. 1516), the official dian Honey Council cil.ca

WE HAD ONE OF THOSE . . .!

but we threw ours away

Used anytime between 1880 right up to 1930 this thing is made out of cast iron and could be screwed



to the bench or counter. It is about 12 or 14 inches in length but who would have used it and for what purpose? (Answer on page 12)

MITE KILLERS

The authors investigated the effect of introducing spores of the mite-killing fungus, Hirsutella thompsoni into bee colonies. They compared the effectiveness of two formulations (spray and dust) with formic acid and Apistan. According to the results, H. Thompsoni shows considerable promise in preliminary experiments, but more needs to be done to develop a proper formulation and improved delivery method. Besides fungi, information has recently appeared on Internet discussion lists that some beekeepers have observed lower Varroa populations in honeybee colonies with populations of pseudo scorpions.

PSEUDO SCORPIONS

Although they also can prey on honeybees, the fact that these arthropods feast on mites, among other creatures found in a hive, suggests they might be a viable biological control option. D. Caron and K. Ross in the second edition of Honey Bee Pests, Predators, and Diseases (Cornell University Press, 1990), edited by R. Morse and R. Nowogrodski indicate these arthropods have been detected in beehives from Brazil to India.

CONCLUSION

In that publication, the authors conclude: "In general, the question of whether the benefits of pseudo scorpions to honev bees is 0 11 f weighed by the

> harm thev

cause un-

resolved."

Thus, it appears that not enough is known about pseudo scorpions at this time to consider them as a viable biological control option. In addition, there may be great risk to bee colonies if these creatures are inappropriately transferred from one habitat to another, this has been called the "Nemesis Effect." and must be taken seriously when considering the introduction of any species for biological control or other reasons.

Dr Malcolm University of Florida.

PORTRAIT OF A BEEKEEPER

My introduction into beekeeping came by chance only about three years ago. My mother-in-law, Ann Moyle, was having a problem with a swarm which had decided to settle under her house roof.

To her rescue came Silvia Hopwood, fully equipped to tackle the problem. We were so interested in the task in hand that Ann even took a photograph of the event! Before she knew it Ann was sitting at her first BBKA meeting being thoroughly entertained by a roomful of bee enthusiasts - she was hooked!



Angela Moyle
It wasn't long before she and I had bought second hand hives, clothing and a myriad of other bits and pieces which we were clueless how to use.

This was where our friend and personal tutor John Zamorski came to our rescue and helped us establish our first hives.

The year 2000 also saw the appointment of a new secretary for the Association - that's me!

The year also saw us win our first prize at the annual honey show. Although we have a long way to go on the experience front it has been totally fascinating so far and, Oh! How precious is every spoonful of honey our bees have produced!

ELECTRONIC BEEKEEPING?

.... not quite! but we are using a fair amount of technology to produce BeeTalk.

As you might imagine, taking various bits and pieces from members, articles culled from magazines and from the internet and then juggling them to fit tidily into twelve pages is fairly time consuming.

To complicate matters, Arthur (Assistant, acting, unpaid, part time, honorary editor) spends



several months each year in Scotland so a fair amount of material whizzes backwards and forwards between Bill in Barrowford and Arthur in Acharacle

Just take this page for instance. Bill took the photograph of Angela on his digital camera - no film, no developer - just electronics. He then attaches the photograph to an e-mail and sends it off to Arthur who re-sizes it, adjust the contrast and tidies up the background - again down to the marvels of digital electronics.

Angela sends Bill and e-mail with her biography, Bill e-mails it to Arthur who loads it into the computer and makes it fit the column.

That happens with all the various articles and snippets of news. The whole lot is assembled, printed on high quality paper and passed to Michael Birt who uses a high quality electronic photo copier to produce your copy of BeeTalk..



And is all that sounds very clever - you should see us struggle and hear the language! On second thoughts, you'd better not hear the language.

THE ITALIAN CONNECTION

EARLY JUNE Cari Saluti from us both once again here in Geminiano.

Snow showers in the first week of May to over 34°c in the last week came as a shock and for a while life had to slow down as we came to grips with the unexpected heat, it didn't last. In fact it came to an end with thunderstorms, heavy rain and golf ball size hail stones that snapped branches, striped fruit, broke flowers and perforated our vine and kiwi leaves, as I write it is still raining. At least we only suffer damage to our plants. Reports from Lombardy and Como spoke of people being killed, struck by lightening, four sat around a picnic table, as well as others sheltering under trees from the rain.

Swarming started in mid April and went on until mid May and we had one or two hectic

moments. One warm morning we started to hive a swarm in a small five frame nucleus box when Jeni noticed another emerging, then another and finally a fifth. Five prime swarms in the air at once. We just sat back and watched and waited. Yes they all ended up in one king sized

cluster where the first swarm had landed. The nuc box was changed for a full sized twelve frame hive and they just about managed to fit in. A quick feed with thymol and supers straight away. Another record broken for us, last year we had four swarms in the air together and we ask is it only Italian bees that behave in this way? It never happened in Colne.

Just when we thought swarming was all over we had a call from Cantiga, a small village up the mountain from us to say a swarmed had arrived that day, between outer and inner doors of a large house owned by a retired french-Italian couple. I went with a five frame hive expecting no problems. But nothing so straight forward and a shock awaited as I slowly opened one of the double doors. 25% of the space taken up with bees and comb. It looked like they had been there for weeks. I had to cut them out. In the end after two visits and many stings they are now in a decent hive, fed and settled ready for a super.

After changing old comb, sorting swarms, we have had lots of foundation to make, over 300 sheets for brood frames and now a dozen supers to fill and we are glad that we took so much notice of our mentor Jack Armistead and his many lessons with the foundation mould. It should be a job for the winter evenings but I have found the wax gets brittle in the cold, so now we make it as we need it. due to my bad planning sometimes only just in time for the next swarm!

This spring with all the rain the meadows have been a picture with a vast assortment of flowers, at times blue with large areas of meadow clary (salvia pratensis) and pink safoin (onobrychis viciifolia) both of which the bees have been working nonstop and now the lucerne or alfalfa (medicago

is were most of our honey comes from as it re-flowers after each cut, sometimes after the third cut it is still flowering in November and only the first frosts stop it.

sativa) is starting to flower, this

Our animal companions have been showing themselves. One evening we were fortunate to see tow large snakes over a meter and a half in length (elaphe

longissima) entwined and mating on the barn roof with one of our cats sat only inches away wondering what all the fuss was. Also we were fortunate to have the camera handy before the cat scared them away!

The other visitors have been the wild boar yet again, more of a problem as they insist in digging up our potatoes, we think just for the fun of it as thy don't seem to eat them. Jeni has rigged up a trip wire with tine cans, plastic bags and bells attached but knowing the boar they will probably just laugh at all this and take it out on the corn as they did last year! Again not a problem we had to face in Colne!

Now we are waiting for a few weeks of fine weather to get our grass cut and baled, the last big job of the summer apart from, we hope, running out of supers as the bees fill them. So with this in mind we wish you all have the same problem.

Arrivederci. From us both for now

Jake and

THE RIGHT TIME TO ADD SUPERS

Beginners can find it difficult to work out just when supers should be added. Lack of attention to this point can be a factor in the cause of swarming. If supers are not added in time, it can induce swarming through overcrowding. If put on too soon it can cool down the temperature in the brood box. Bees can also start nibbling at wax foundation and propolise it.

So, how can we tell when supers should be added? If bees start building nice white comb in the space between the top of the frames and the underside of the crown board, they are definitely running out of space.

Perspex or glass crown boards are very handy as this activity can easily be observed. If the brood box is choc full of bees even to the two outside frames (looking up at you) they are ready for more room. Again the "See through" crown boards are useful.

Bees won't move up into supers until they are really crowded out below and definitely not into sections.

If in doubt (or going on holidays) use the newspaper method, that is, put a sheet of newspaper under the first super to be added and if the bees need more room they will eat through the paper. If you are going to be away for a long period one could do the same with a second super. Beekeepers sometimes find it difficult to get bees to go up into sections and a tip I was given many years ago was to put on the crate without any queen excluder and after a few days when they have gone up, smoke down the bees and queen. Then put on the queen excluder.

It can is very difficult to get bees to "work" sections properly and it takes a very good strong nectar flow to do so.

I think a better way, if you want comb honey (which after all is the best as it is untouched by human hand and has a taste all of its own), is to go for cut comb by putting in un-wired thin wax into ordinary super frames (especially as bees will work frames quicker than sections). The second super is put on when first is three quarters capped.

A PRESENT FOR THE TEACHER



It's the end of term in the nursery class. Some of the children have brought little presents for the teacher.

Jenni, whose Dad has a sweet shop, hands over her parcel. The teacher examines it carefully, pretends to ponder "I wonder what could be in here? could it be sweets?. Little Jenni gives an excited shout of "Yes Miss!"

The teacher turns to the second parcel. This is from Tim whose parent have a florists shop. The teacher goes through the same exercise, turning the parcel round and round and the says "I wonder if this is some flowers.

Again excited shouts from the children - Miss has guessed right again.

The last parcel is from William the son



of a beekeeper who specialises in making Mead. William's parcel is leaking, just a little, at one corner.

The teacher examines the box, touches her finger to the liquid and tastes it. "Is it mead?" She asks. "No!" shouts an excited little William. She tastes the leak again "Could it by thin honey?" Asks the teacher. "No!" shouts little William. "Please Miss, It's a puppy!"

UPDATE ON MONTSERRAT

CONSERVATION

Hello again to Blackburn and E.Lancs beekeepers. John and I came back to the U.K. at the end of April (when the weather got warmer and drier!) but I didn't stay for long. I had been invited back by the Montserrat National Trust for an environmental

workshop on Conservation, with a view to establishing a Botanic Garden. Participants came from our own Kew Gardens, from Leeds University and from other islands such as Turks and Caicos, Dominica and Anguilla.

My bit was to give presentations on the importance of bees for pollination, with a view to setting up a beekeeping project for local backyard

beekeeping. The people of Montserrat have been through very difficult times, the volcano is still erupting, and there is no prospect of most folk going back to their original homes. So a bit of extra money will help a lot if some small-scale apiaries are established.



The Montserrat National Trust are very keen on keeping bees in the Botanic Garden so I took out two flat-packed Langstroth hives (the most popular hive outside the U.K.) and some foundation, and these will serve to get things going. The hives can be copied locally but we will need the other accessories – simple veils, hive tools and smokers, although it's amazing what local craftsmen and women can make out of seemingly nothing.

The only beekeeper still operating has had to work on construction sites to feed his family as he rescued only four hives of the original 150 that are now buried under ash. This leaves him little time to attend to his hives, so I am trying to raise funds through the British Government to enable him to have some time off work to do some queen rearing. We rely on his stocks, and those feral colonies still around, because there is no Varroa on the island and every precaution must be taken to ensure it stays that way.

I was also asked to give some presentations on

orchids – there are twenty-four recorded species growing wild although so far I have found only fourteen. This created a lot of interest and is important environmentally as orchids are the last plants in the evolutionary chain to colonise forest, and are therefore an indicator of woodland health.

Many are pollenised by Euglossine bees so there *is* a link between my two obsessions!

EXHAUSTED

The seventeen days were very productive – we had lectures on small and large scale composting, plant propagation, forestry, setting up botanic gardens, backyard gardening for subsistence, good garden

practice.....and I fell into bed each night exhausted but exhilarated by the involvement with such committed experts in their fields. However, I'm home again, only to find my farmed-out colonies died, as did so many other people's bees. I have a couple of swarms building up nicely, and they are being treated as precious commodities these days!

Writing this on a blazing hot day, it seems inappropriate to say I'm looking forward to returning to Montserrat in the Autumn, but I'm sure I will when those grey days arrive; and I can't wait to get on with my Montserrat Beekeeping Project.

BE PREPARED

Don't forget to prepare for the Honey Shows, will you – the Royal Lancashire Show needs all the support you can give it after this year's disaster with the dreaded F&M, then there is Southport Flower show, the Branch Show and the Association Show. Let's not allow Liverpool to get the most points again – the more entries we get from Blackburn, the more points are potentially ours.

Happy beekeeping,

Bridget Beattie

THE CHOICE OF BEES

GERMAN BEEKEEPERS

At a recent talk I gave to a beekeeping association I was asked a question I have been asked many times before. "Seeing that German beekeepers have successfully introduced the Carnica bee throughout Germany, and improved it considerably, would it not make sense to do likewise here in England by massive importation's of Carniolan bees".

Having visited Germany on several occasions on bee tours, and seen for myself the excellent colonies of Carniolan bees and the ease with which they can be handled without any protective clothing, I can understand the reasoning behind the question. Why re-invent the wheel? Why not make use of all the work put in by the German research institutes, and all the bee breeding work that has gone into making the Carniolan bee such an excellent proposition.

CARNIOLAN BEES

The answer I gave to the beekeeper posing the question was this: "As a race of people, Germans will work together towards a single objective. This is reflected in beekeeping where there was until recently, one unified beekeeping organisation, Deutscher Inkerbund (DIB), When the decision was made after the last war to introduce the Carniolan bee it had the whole-hearted support of German beekeepers who worked together in this work. The English as a race all want to do their own thing. Beekeepers here have very firm views on the type of bee that they want. This variety of opinion encompasses, Buckfast, New Zealand Italians, Carniolans, Dark European and even Hybrids. The result is a mish-mash of bees that makes bee breeding very difficult."

BIBBA

In the past I have on behalf of BIBBA written to MP's, Ministers. and government departments trying to get imports of foreign bees stopped, all to no avail. I may well continue to waste my time by doing so again in the future. However I have come round to the opinion that in order to make progress in promoting the native bee of these islands it is more constructive to concentrate on trying to get areas mono-strained with the native bee. To this end BIBBA actively promote bee breeding groups, both BIBBA groups and non-BIBBA groups.

TIPPERARY

There is no finer example of this than the work of the Galtee Bee Breeders in Co. Tipperary. Within a few short years a vast area has been mono-strained with the native bee. When eminent people such as Dr. Ralph Buchler who visited the area a few years ago, compares the docility of the bees favourably to that of the Carniolan bee, then it shows how valuable the work done in Ireland is.

NATIVE BEES

It seems strange that we should have beekeepers here in England hankering after repeating what the German beekeepers have done, and at the same time for German beekeepers wishing they had chosen the native bee of Germany instead of the Carniolan. I say this because the person in charge of the Carniolan bee breeding project admitted that in hindsight it would have been better if Germany had chosen to improve their native bee, the Dark European honeybee. This is of course the same bee as the native bee of these islands.

I mentioned earlier in this article that there had been just one beekeeping organisation in Germany until recently. In the last few years a Black Bee organisation has sprung up, which advocates using the Dark European honeybee. This obviously has resulted in conflict of interests, which on occasion has seen colonies of dark bees destroyed by arson. My own view is that as so much has been invested in the introduction of the Carniolan bee it may be that it is better to go along with that, rather than make the change to the native bee. It is of course up to the German beekeepers themselves to resolve this problem.

VARROA IN SLIGO

During my visits to Ireland in recent years I have been impressed by the way Irish beekeepers work together. I find it refreshing to come to Gormanston, for this event is such a nice blend of lectures, demonstrations, workshops and above all social activities that it becomes addictive, one visit and you're hooked.

The news that Varroa had been found in Co. Sligo was indeed really bad news, but I feel that Irish beekeeping will tackle this with determination, I know beekeepers, as a whole will wish them well.

BY ALBERT KNIGHT BBKA HON SEC.

WHY STUDY THE HONEY BEE? (Continued from last issue)

COMPLEX SYSTEMS

Complex systems, depend upon the coordination of the complex parts within that system. This is equally true of a car, human body or an army. Television, every day, informs us of our human society, as story after story of bureaucratic systems are presented. Organisation is not easy yet insect societies such as the honey bee manage it. Insect societies, therefore, present researchers with an opportunity of studying the mechanisms by which a complex system is organized.

THOMAS SEELEY

Much research in this area has been carried out by a US researcher, Thomas Seeley of Cornell University. Seeley has particularly focused on how the honey bee colony organizes its foraging system. Efficient foraging in the honey bee is much more than the workers from a colony flying about at random in search of flowers. In fact, foraging is coordinated in such a way that the colony as a whole is continually tracking the best flower patches and allocating its foragers to these. To describe in detail how this is done would require more space than is available here.

Briefly, it involves only the foragers who are currently visiting the most rewarding patches of flowers dancing. In this way the recruit bees, who use the dances to direct them to flowers, are not sent to flower patches at random but to the best patches. The amazing thing is that no one bee knows which the best patches are and there is no central collection of information, so beloved of human governments, to determine this. In fact, the system is said to be "self-organized".

That is, each bee dances or not according to her own perception and experience, and in response to her interactions with other bees—in particular with the receiver bees who unload her nectar. The process of directing foragers to the best patches emerges out of these interactions. Seeley refers to this as the "wisdom of the hive", meaning that the bees collectively solve a problem that none of them would be able to do individually. In a real sense the hive is an intelligence, albeit an unconscious one, with the intelligence arising through the interactions of many bees each of whom has a piece of the overall picture.

LOADERS AND UNLOADERS

Directing foragers to the best patches is not the only problem facing the bee colony in the efficient organisation of foraging. Because foragers unload their nectar to receivers, who then store the nectar in cells, there needs to be a balance between the work capacities of foragers and receivers.

If there are two few receivers to unload the foragers then foragers have to waste time queueing to be unloaded. In fact, the hive becomes like a supermarket with too many customers for the number of checkouts in operation. LASI is investigating some important details of how the balance between the number of foragers and receivers is achieved in the honey bee colony.

CONFLICT RESOLUTION

We are all aware of the conflicts that occur in human society, both in society at large and within a family. To a beekeeper it must seem that the honey bee society is immune from conflict with the bees living and working in total harmony. In fact this is not so. There is potential for conflict in the bee colony and the conflict is over reproduction.

However, the honey bee also has a very powerful mechanism for resolving the conflict. The reproductive conflict arises because worker bees are not completely sterile. They have ovaries and can lay eggs.

Because workers cannot mate any eggs they lay are unfertilised and, due to the system of sex determination found between a worker and her own sons (0.5) is greater than the relationship between a worker and her brothers, the queen's sons (0.25), natural selection, should, apparently, favour egg laying by workers. (Because the genetic relationship is greater, sons are worth twice as much as brothers to a worker bee.)

ONE IN TEN THOUSAND

However, reproduction by workers is rare. Only 1 worker in 10,000 in a normal queenright honey bee colony has ovaries containing full-sized eggs and only 1 adult drone in 1000 is a worker's son. The reason that workers' sons are rare is that workers prevent each other from reproducing.

EGG DESTROYERS

In fact, workers kill eggs laid by other workers. This is to the queen's advantage (0.25). In other words, although natural selection may favour workers to lay eggs it also favours workers to prevent each other from reproducing. In the honey bee it seems that the collective suppression of reproduction by worker policing has triumphed over the selfish action of laying eggs. Worker policing is a mechanism that causes social harmony by reducing the advantage of acting selfishly—that is by laying eggs.

Research at Sheffield University is investigating worker policing in the honey bee and also conflict and policing in ants and wasps. Recent research by Kevin Foster, a Ph. D. student, has discovered that worker policing by egg eating occurs in common wasps. This is particularly interesting because wasps and honey bees evolved social life independently, meaning that worker policing has originated more than once in the social insects. Dr Francis L. W. Ratnicks Department of Animal and Plant Sciences. Sheffield University (Taken from a BIBBA Publication)

OPEN DAY

A big thank you to everyone who came to support us at the open day at Towneley Hall.

It was a good day for the club with the enrolment of two new members and let's give them a big welcome. It was good to see so many people getting together. I was grateful for the way members helped on the stand by talking to the public without any prompting from me. Brian Jackson positioned himself by the display hive and seemed to be having great fun talking to the kids about the workings of the colony. Thanks Brian, you may have a job for next year.

Bill Ainsworth has suggested that next year, more people should be involved to have a "proper" display. I think (hope) he means a bigger one. (I am not offended Bill) He is absolutely right because at the end of the day we must promote beekeeping to the public and the more of us involved in this, the better our Branch will be for it. We have a wonderful membership and for those of you who did not make it, you missed a right good do. Once again thanks to all who came even if your name wasn't mentioned. For those who didn't, don't miss next year.

John Zamorski

HOW TO SURVIVE A HEART ATTACK

(when you're on your own!)

(From The Essex Beekeeper Jan.2001) I read this in a magazine and thought it may apply to beekeepers out in the sticks on their own.

Let's say it's 6.15pm and you're driving home (alone of course) after an unusually hard day on the job. You're really tired, upset and frustrated. Suddenly you start experiencing severe pain in your chest that starts to radiate out to your arm and up into your jaw. You are only about five miles from the hospital nearest your home, but unfortunately you don't know if you'll be able to make it that far.

What can you do? You've been trained in CPR but the guy who taught the course neglected to tell you how to perform it on yourself. Read on.

Without help, the person whose heart stops beating properly and who begins to feel faint, has only about 10 seconds left before losing consciousness. However, these victims can help themselves by coughing repeatedly and very vigorously.

A deep breath should be taken before each cough, and the cough must be deep and prolonged, as when producing sputum from deep inside the chest. A breath and cough must be repeated about every two seconds without let up until help arrives, or until the heart is beating normally again.

Deep breaths get oxygen into the lungs and coughing movements squeeze the heart and keep the blood circulating. The squeezing pressure on the heart also helps regain normal rhythm. In this way heart attack victims can get to a hospital.

(From Health Care, Rochester General Hospital)

Tell as many people as possible about this. It could save their lives!

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'

AGGRESSIVE COLONIES

The best way of dealing with these is to remove most of the aggressors i.e. the foragers. Early in the morning, move the hive to a new location about twenty feet away. On the original site, set up a floorboard, a super complete with frames, (of which one or two should contain some honey) a crown board and a roof. The foragers will leave the relocated brood box, collect nectar and return to the super on the original site. This will deplete the strength of the parent colony. Allow a day to elapse before carrying out a search of the brood box. Finding the queen will be easier with the population considerably reduced.

HEATHER

If you live within three miles of the heather, clear your supers of Summer honey by the third week in August. Otherwise the bees will put heather honey on top of the Summer and cause great difficulty when you come to extracting.

ABOUT SWARMING

Swarming has dampened the enthusiasm of many a beginner and has been the cause of many beginners giving up beekeeping altogether, as they get no honey. They have to feed their bees heavily in the Autumn and then maybe bees die out come spring because enough syrup wasn't fed. It is no use hoping your bees won't swarm. If they don't swarm it is usually because they are too weak to do so. It is the natural instinct of the bee to swarm to propagate the species all over the countryside. The bees job in nature is to pollinate flowers. They only store honey and pollen as food to bring them over the lean periods. Swarming and swarm control should be thoroughly studied by all beekeepers and choose one or two that appeal to you; learn them well and STICK TO THEM. You won't succeed 100% but you should get to 90% but don't be surprised - I've got swarms, Swarming!! They are unpredictable after all they are females!

THE WEBSITE

Our website has been udated by Michael Birt and now contains the programme of events and activities. www,kimberim. freeserve co.uk

ANOTHER SUPER?

If in doubt add the super but put a sheet of newspaper between the new super and the one being worked. If the bees need it they will remove the paper. If they don't need it - at least it will help to keep the hive warm.

BLOOMING COMPUTERS!

If you hate the things - just remember that Technology' is just another word for something which doesn't work properly yet.

ST AMBROSE

December 7th is St Ambrose' Day, who is generally recognised as the patron saint of beekeepers. But what is the connection with beekeeping? He was born in about 340 ad in Trier, a city in Germany. He became a Bishop of the early church and argued strongly against the Aryan heresy of that time; he also defended the freedom of the church from Government interference. It is said that he urged upon women the crowning virtue of virginity to the extent that noble families were reluctant to let their marriageable daughters hear his sermons. The only connection with bees is a legend that as a small boy he fell asleep in the garden and his mother found a bee, some say a swarm, crawling in and out of his mouth. Thanks To Nobby Clark and the Essex Beekeeper, for this information.

MEAD MAKING

After the recent demonstration on mead making, some members have expressed an interest.

We have a good little booklet on the history and making of mead in our association library (Contact John Zamorski). The booklet is also available from John Fulton. Take a look at his advert on the back cover.

SWARM COLLECTORS

Beekeepers prepared to collect swarms Blackburn, Darwen Robert Fulton & Mellor 01254 772780

Clitheroe John Zamorski 01200 427661 Ribble Valley David Bush 01200 428152

Nelson & Colne
Bill Ainsworth
01282 614015

Padiham Ken Gaiger 01282 778887

Barnoldswick and Earby

Accrington & Burnley

Ian Dent-Willoughby
01282 814374

John Wilson

FROM THE TREASURER

Subscriptions are due on November 1st. If your subscription is outstanding, could I ask you to pay before March 1st in order to simplify administration.

The fee is unchanged at £11 per full member and £2 for each additional family member. Extra Bee Disease Insurance costs are:

| Up to | 5 Hives | £3.00 | | |
|-------------------------------|---------------------|-------|--|--|
| Up to | 5 Hives 10 Hives | £5.40 | | |
| Up to | 15 Hives | £7.20 | | |
| Up to | 20 Hives | £8.40 | | |
| Up to | 25 Hives | £9.00 | | |
| CHEQUES SENT TO OUR TREASURER | | | | |
| SHOULD BE MADE PAYABLE TO: | | | | |
| L & N W B K A | | | | |

MEETINGS

JULY 2 MICHAEL & SAIPIN BIRT, LONG ROW, BARKER LANE, MELLOR

2.30pm "CANDLEMAKING" by JOHN ZAMORSKI

AUG 19 KEN GAIGER, 2 HIGHAM ROAD, PADIHAM 2.30pm "VAROA UPDATE" by IAN McLAIN

SEPT 23 JOHN WILSON, BACK 'O BOWLEY FARM, GREAT HARWOOD

2.30pm "PREPARATION FOR THE HONEY SHOW" by BARRY MELLERS

INFORMATION ABOUT 'BEE TALK'

Planned publication dates: February 2001

May 2001 July 2001 October 2001

Latest time for copy is the first week of the month prior to publica-

If you have any information, titbits, articles or stories about beekeeping, please contact the editor: Bill Ainsworth, 296 Scotland Road, Nelson, 'phone 01282 614015 e-mail: bill@scotroad.free-online.co.uk or arthur@lapwing.idps.co.uk

Please don't worry about writing skills, between us we will knock it into shape. We have no objection to any part or the whole of this publication being reproduced. All we would ask is that Blackburn & District Beekeepers Association is acknowledged

WE HAD ONE OF THOSE . . . (Answer)

When I was a lad I worked in the photographic department of a Chemist's shop. Downstairs in the dispensing room they had one of these fixed to the counter. The girls used to fill the bottles, select a cork and, if it didn't fit, squash it in the cork press!

CLEAVER GROUP LTD Specialist meat suppliers to the catering trade.

2 BRADLEY ROAD EAST, NELSON 'tel 698432

Supplier of fridges, freezers, mi-->cro-->waves, de-humidifiers - full selection of frozen foods and dry goods.

140 LEEDS ROAD NELSON 'tel 698119

WHY NOT HAVE A GO AT HOME BREWING?



See Bob Fulton at the regular, Darwen three day market where he shows a complete range of Home Brew Equipment.

Every Monday, Friday & Saturday
Telephone 01254 772780
e-mail address
bob@darwenbrew.fsnet.co.uk

Page 14