

Furness Flyer

Autumn
2009



A Newsletter for Furness Beekeeper Members.
www.furnessbeekeepers.co.uk

Some Winter Dates

October 28th

The AGM 7.30 at 7.30

Followed by a free pie and pea supper.

The Wax Fayre

We are ringing the changes and not having the Christmas Wax Fayre as we have had for a couple of years and instead are holding the wax fayre on Saturday morning the 31st October 10.00 am till 2.00pm, which is Halloween and will have the appropriate theme.

Friday November 20th

Candle making Greenodd Village Hall.

From 7.30.

If you would like to make some candles (moulded or rolled) or wax figures as stocking fillers for Christmas then we would be pleased to see you.

There will be some light refreshments and a chat !!

We used to have these evenings in the past and they were always popular.

Many thanks for the help and contributions for this issue from

Mike Luke

Dave Stewart

Anne Fitzherbert

Lorraine Priestley

Front Cover.

Guess Who.....No prizes !!

Photo D Walmsley 2009

Letter from the Chairman

So, just so I'm clear...earlier in the year it was a barbeque summer we were led to expect. Then it was intermittent weather. Finally apologies came with the excuse that we needed cheering up so the new £multi-million computer lied, but to now expect an Indian Summer. Or perhaps they mean a mild winter? It's no wonder the English spend so much time discussing the weather. My money's on a white Christmas.

But enough of misery...how are your bees? Despite there not being a huge amount of honey this year (with the odd surprising exception) bees seem to be in reasonable health and a record number of new members have been supplied with healthy colonies. These include the restocking of the Observation hive at Gleaston Mill complete with its' high-tech heating system. I do hope they survive. Generally varroa numbers are low and we are ensuring that a supply of Apiguard is available to all members, as recommended by Stuart Beattie.

Despite the rotten summer we continued with excellent Live Bee Shows (albeit without the gazebo at times), I think North Lonsdale and Rusland Horticultural Shows have followed my previous report. The Apiary remained very busy on Saturday mornings, which was very encouraging indeed. I hope those who visited learned something. We are harbouring an idea to expand the site in the near future – watch this space.

As the season is now almost at a close we have planned some of the winter programme, which hasn't started too well. The Nosema identification evening was very poorly attended, which was fortunate

in that I forgot about it – but a bit of a disappointment considering we have nearly 150 members. I guess the Committee must consider if we continue to organise such events.

Despite the initial hiccup we still have the AGM, Halloween Honey and Wax Fayre and Candle-making evening to come. I hope we'll see some of you there. We are also in negotiations to appear at the Dickensian Weekend in Ulverston as an attraction (Victorian times did include honey production and candle manufacture!). I may even get dressed up!!

So, prior to the AGM I would like to offer my thanks to the fellow committee members who continue to do a fantastic job on your behalf – especially David Walmsley who keeps the whole Association going with his tireless work and Edna for letting him!). He has already planned much of next years' Convention – indeed our 21st! The line-up sounds excellent and I'm sure those who attend will thoroughly enjoy the day.

Finally, if you haven't already done so then treat your bees without delay and feed them well. Please note the article on page 9. We are in a strong position going into winter and hopefully the state of the bee population will continue to improve. Always remember...ne te confundant illigiti-mi!

Mike Luke Autumn 2009

Letter from the Editor.

I can hardly believe that September is here and the beekeeping season is drawing to a close.

Another wet summer apart from May and June and generally a poor honey harvest.

On the positive side, reports are that varroa levels are low in comparison to previous years which can only help in the health of the colonies.

On the negative side the continual rain we have had in July and August have greatly reduced the food levels in the hives and care must be taken to ensure that your bees are not starving. Yes, there is sometimes a need to feed bees in summer.

Membership Issues.

The beekeeping world nationally has had unprecedented increases in the number of people wanting to keep bees.

Thornes sold out of quite a few items of equipment, which remarkable actually included smokers !

The BBKA have seen their membership increase by 4000, of course not everyone joins the BBKA, and Thornes reckon that there is about an extra 10,000 beekeepers in the UK !!

Furness Beekeepers have seen their membership increase again this year to 140 which is an all time high.

We wish all our new members welcome to our club and hope that you enjoy your beekeeping with us.

Foul Brood

Stewart Beattie has written to tell us that he has discovered American Foulbrood in two hives near Longtown in the Carlisle area.

We hope that the outbreak can be contained.

People that have been very keen to start beekeeping and not been able to source

bees locally have been buying bees from infected areas and could inadvertently bring disease to Cumbria.

People that have bought bees in from other areas should inform Stewart Beattie 01229 463127

All the new members of FBKA have been supplied with bees locally and therefore should not be a risk to other beekeepers.

All members of FBKA are insured against the loss of their bee through foulbrood disease as part of their membership pack.

The Annual General Meeting

This year our AGM will be held on Wednesday October 28th at Greenodd Village Hall., starting 7.30 PM

An official notification with the agenda will be sent nearer the event.

I hope as many people as possible try and come. We do not press gang people into becoming committee members but if you are interested in taking an active role in running the association please let me know.

The now usual free pie and pea supper will follow the AGM

The Wax Fayre

We are ringing the changes and not having the Christmas Wax Fayre and instead are holding the wax fayre on Saturday the 31st October, which is Halloween and will have the appropriate theme.

I have included a separate flyer to give more detailed information.

I hope that members will be able to support this effort.

Please let me know if you could help on the day.

David Walmsley 2009

**Beekeping is a Question of numbers?
0 to 2 Hives in 3 weeks and 15 jars of
honey in 8 weeks!!**

A Beginner's Tale!

I have lived in Gleaston for seven years now one becomes accustomed to strange events happening now and again. There have been Duck Races, Streakers in the playground and Summer Balls on the Green. Couple of years ago I was walking past the Gleaston Water Mill I came across folks dressing up in strange white smocks and Wellington boots.

Being an inquisitive person, I mistakenly showed some interest, and before I knew it, was myself similarly dressed and checked out by a lady who I later found out was the apiary managers' assistant.

I saw some bees and joined as a member and later went to the AGM, where in a rush of blood decided to join the committee.

It was winter and I was advised to buy bee suits and gloves and David Walmsley got me a smoker, hive tool and feeders at Stoneleigh. Before I knew it was early spring and Beginners classes started at Greenodd. Very interesting they were too and a great deal of information was clearly put across to the packed hall where budding beekeepers soaked up information, tea, coffee and biscuits ...not necessarily as Eric Morecambe used to say "in that order"!

Saturday mornings at the apiary were well attended. I got there as much as I could attired in my pristine bee suit. Eventually when the shout came round usually from David Johnson, "who has not had a go?" Either everyone behind me took a pace back or I tripped forward...one or the other and there I was handling my first frame of bees.....how nerve racking that was!

The weeks went by, early summer was good, and then I heard the words I will

never forget. A certain club secretary came up to me and said "I think I have got you some bees in a couple of weeks"

"Wonderful" I saidbut I was thinking "What so soon!!"

Before I knew it, Saturday 13th June 2009 came and so did the bees. In the first 30 seconds I was stung as we got the hive out of the said secretary's car. What a start. A second hand hive was obtained and as I realised during those first tentative inspections that there were a lot of bees in the hive. Long range conversations were had and swarming probabilities discussed (50/50 chance).

It was then that I met another member of the beekeping community who lives in Urswick. He had the uncanny knack of relieving me of my hard earned cash in return for plastic shrink wrapped cedar items which took all of my O level wood-working skills gained 30 years ago to put together. Aren't the instructions badly written?...or is it just me?



Dave's Swarm

my less than pristine off white bee suit, off I went, knowing already what I was going to find in my hive, a perfectly sealed

As I frantically assembled on the 4th July 2009, brood and super boxes in the garage it occurred to me that I don't normally hear the bees at the top of the garden.

Donning

Queen cell. Yes it was there, and so was a perfectly formed swarm cluster of bees up a tree 15 feet up in the air at the back of a



Collecting the swarm

path of a neighbour!!

It's at this point you start ringing the said secretary who has in my opinion bred a type of homing bee. It is no strange occurrence to my mind that the answer machine came on during the call. What nexttry and find the number of the chairman.....luckily he was in and arrived an hour later. As Mike cut down branches and shook bees into boxes and waited for the swarm to collect, we discussed the "Walmsley strain "of homing bees and swarming probabilitieswell what he really meant was an 80/20 chance of swarming. Two hours later we had cobbled together another hive and put the swarm in it. Five weeks later I collected honey from 8 out of 12 frames from the super in the original hive and produced 15 jars of honey.

In conclusion, a baptism of fire, a steep learning curve and a very enjoyable if sometimes nerve racking introduction to beekeeping. If it happens to you don't panic FBK members will come to your rescue as they did mine. Thanks Folkshopefully next year will be a bit quieter.

Now for some numbers (£)....see if you can think where they fit!
The total is £634.50p and that's without the sugar!

55,0.5,34,176,34,67,102,90,23,17, 36.
David Stewart Gleaston 2009.

Homing bees ? My bees are 'supermarket bees'.....buy one- get one free !!!
Ed.

Queen bee

No lesser personage than Her Majesty the Queen is the latest celebrity to cotton on to the benefits of beekeeping, it seems. Further to the report in this months *Bee Craft* about urban beekeeping, it appears the **Crown Estate** has added a rooftop hive to its property in London's Regent Street. It is unclear whether HM will don 'whites' herself, but apparently she does already have a hive producing fine honey in Windsor...
Bee Craft 2009

Bees on the big screen

A 'shocking' new documentary, *Vanishing of the Bees*, hits cinemas on October 9. The film forms part of the Co-op's **Plan Bee** awareness drive. Journalists attending a press screening in August admitted to being 'shocked' by the film.
● For those who can't wait, Sky 3 (available on digital Freeview) offers *Silence of the Bees* at 6.30pm on Friday, September 18.
Bee Craft 2009

I can recommend Bee Craft.
Visit www.bee-craft.com/shop for subscription details and credit card purchases (or call 01733 771221). To order by post send cheques/POs (payable to Bee Craft Ltd) to:
Sue Jakeman, 107 Church Street, Werrington, Peterborough PE4 6QF.

Honeybees warn of risky flowers

Matt Walker

Editor, Earth News

Honeybees warn each other to steer clear of dangerous flowers where they might get killed by lurking predators.



Danger for bees

Scientists made the discovery by placing dead bees upon flowers and then watching how newly arriving bees react to the danger. Not only do the bees avoid the flowers, they then communicate the threat when they return to the hive via their well known waggle dance.

The discovery is published in the journal *Animal Behaviour*.

The honeybee waggle dance is a surprisingly sophisticated mode of communication.

When foraging bees return to the hive, they waggle their bodies in a complex dance first deciphered by biologists more than 40 years ago.

The angle and direction of the forager bees' waggle dance conveys how far and in what direction other more naive bees need to fly to reach flowers that will provide plentiful sources of food.

The crab spider *Diaea dorsata* is best avoided. Honeybees are also more likely to waggle and dance when returning from food sources containing high concentrations of sucrose.

But now scientists Kevin Abbott and Reuven Dukas of McMaster University in Hamilton, Ontario, Canada have found that honeybees use the waggle dance to do more than just encourage others in their colony to visit bountiful flowers.

Avoiding danger

They trained honeybees to visit two artificial flowers containing the same amount and concentration of food.

They left one flower untouched, making it a "safe" food source for the bees.

On the other flower, they placed the bodies of two dead bees, so they were visible to arriving insects, but would not interfere with their foraging.

A crab spider kills a flower visiting wasp. They then recorded whether and how the bees performed a waggle dance on their return to other members of the hive colony.

On average, bees returning from safe flowers performed 20 to 30 times more waggle runs than bees returning from dangerous flowers.

That shows that the bees recognise that certain flowers carry a higher risk of being killed or eaten by predators, such as crab spiders or other spider species that ambush visiting bees.

What's more, they factor this risk into their waggle dances, tempering them to steer their colony mates away from flowers that might be dangerous.



The crab spider

Furness Beekeepers Bee Word Word Search



Twenty three words are hidden in the puzzle, all with bees and bee keeping in mind.
How many can you find? We did not find it easy Solution on page 14

Mites a plenty

Early in August last year one of the Seasonal Bee Inspectors (SBI) received a phone call from two beekeepers living near Carmarthen. The problem, that was causing so much anxiety, was the discovery of bees with deformed wings and small or stunted abdomens.

The SBI decided to visit and check out the colony as the bees had been treated with pyrethroids earlier in the season and this was not an area known to have resistant varroa mites, although resistant mites had recently been found about fifteen miles away. The hive turned out to hold a strong colony that was heavily infested with mites. Deformed wings, stunted bees, badly affected brood and mites visible on the bees all indicated that the colony was likely to collapse unless it received immediate treatment. The option of using pyrethroids was ruled out. Following a Pyrethroid Resistance Test that gave a Knock Down of 9 mites and a Wash Out of 58. That works out at an efficacy of only 13. Fortunately we had a supply of Apiguard trays and this was the perfect opportunity to see how effective they would be in dealing with resistant mites. The hive was set up correctly, the catch tray in position, supers removed, entrance reduced and room over the top bars of the brood frames to allow the bees easy access to the Apiguard tray.

That was on the 12 August. The beekeepers were asked to keep a record of the daily mite fall and arrangements were made to return to put in the second tray in two weeks time.

If you think back you will remember that last August was pleasantly warm so on the first day the beekeepers counted a drop of 847 mites.

Day two achieved an amazing 1,358 mites and nearly as many on day three with 1,294. Being thorough the beekeepers also discovered that the Apiguard tray was nearly cleaned out so they phoned for advice.

It was decided to put a new tray in much earlier than recommended, as the infestation was obviously severe.

So it was installed on day four, and the mite fall was 660. In only six more days the bees cleaned out the second tray and over that period the daily count totalled another 3,508. With so many mites falling a third tray was used, this one was cleaned out by the bees in eleven days and 2,458 mites fell. On the last day only 34 mites were counted but feeling determined to try for a complete clear up a fourth tray was used.

This last tray of Apiguard was unnecessary as the next three days saw a total of only 49 mites falling, followed by a zero figure from then on. In total 10,169 mites were killed and the colony recovered and thrived.

On the 4 October another Pyrethroid Resistance Test was undertaken as a final check and to everyone's delight the results were zero in the Knock Down and zero in the Wash Out.

John Verran, Regional Bee Inspector, Wales. BBKA News 2006



Showing Apiguard in place on top of the frames
Note the eke (rim) to allow bees access to tray

Too much causes trouble

Any beekeeper will tell you that more you handle bees, the more aggressive they get. Now scientists in America have warned the psychological damage could eventually become permanent, not only in individual bees over their lifetime, but in the strain itself.

The **study** reveals that changes in the brain of the honey bee in response to an immediate threat have much in common with more long-term and even evolutionary differences in honey-bee aggression.

The findings lend support to the idea that nurture (an organism's environment) may ultimately influence nature (its genetic inheritance). Using microarray analysis to measure changes in gene expression in the brains, the researchers observed that changes that occur in the bees brain after it is exposed to alarm pheromone look a lot like the more gradual changes that occur over the bee's lifetime (old bees are more aggressive than young bees).

The findings were more marked in Africanised honey bees. In terms of brain gene expression, Africanised bees look like they were just exposed to a whiff of alarm pheromone, even though they were not.

Gene Robinson, a professor of neuroscience and entomology at the University of Illinois, which was at the forefront of the 2006 honey bee genome project, said: "Some of the same genes associated with aggression that vary due to heredity also vary due to environment.

This shows how nature and nurture both act on the genome.

"We suggest that the molecular processes underlying environmental effects on aggression could have evolved into molecular processes underlying inherited differences in aggression exhibited by Africanised honey bees and European honey bees." Beecraft 2009

Feeding bees for winter.

Honey bees make honey so that they have a winter food store. When the beekeeper harvests his or her honey he/she must ensure that they have adequate stores or they will die of starvation. Dead colonies collect no honey the following year, but every year honey bee colonies do die of starvation. In a National hive, a good-sized colony needs 40 lb (18 kg) of stores to survive the winter and a big colony may need more. As a guide, a National brood frame full on both sides, holds about 5 lb (2.2 kg) of honey, so you will be able to calculate roughly what the bees have by looking at each frame. Take this total from 40 lb (18 kg) and you have the amount of top-up food needed. It is possible to buy ready-mixed food to feed to bees, but most beekeepers, with just a few hives, use a solution made by dissolving ordinary granulated sugar in water at the rate of 2 lb of sugar to 1 pint of water (or 1 kg to 1 litre). As an example, if the bees have 20 lb (9 kg) of honey in their hive they will need another 20 lb (9 kg) of substitute food. To provide this takes 16 lb (7.2 kg) of sugar dissolved in 8 pints (3.6 litres) of water. Feeders are a matter of preference, whatever you use, always feed at dusk, do not spill any of the syrup or leave it uncovered, and give all the hives in the apiary some food when you first start feeding, even those which do not really need any. These are precautions to prevent robbing

Feeding should be completed by the middle of September although this is a counsel of perfection and, with all the other things that need doing, the timetable sometimes slips! However the bees need to store the syrup away, adjust its water content and seal it over before bad weather sets in, so give them adequate time.

Beginners Page

AUTUMN AND WINTER MANAGEMENT

Autumn management is in two parts, one for colonies taken to the heather, and one for those kept at home. Even taking bees to the heather is a two-part operation - a hope that there will be some heather honey and that the colonies will return well provided for winter.

The heather honey nectar flow may come at any time between the beginning of August and the first week in September. It may last two or three weeks, it may last two or three days, and sometimes it fails entirely, as for example, 1946 when many colonies died from starvation on the moors. For practical purposes the nectar flow may be regarded as over by September 7th, and nothing is gained by leaving them on the moors after that date.

Even in a good year, two conditions are likely to apply on returning from the heather - much unsealed honey in the brood chamber and a shortage of young bees. These conditions can be alleviated to some extent by feeding sugar, say 8 - 10 lbs of sugar in 4 - 5 pints of water given in a rapid feeder (such as a Miller type feeder). A large quantity of syrup available causes excitement, which raises the temperature and induces wax secretion enabling the bees to seal their stores. It may also spark off a small spate of brood rearing which is all to the good in providing some young bees.

If colonies are not taken to the heather, the summer nectar flow is usually over by the end of July and nothing is gained by leaving the supers on any longer. In any case, if the bees have access to heather honey, the supers must be removed before the bees start to work it, or difficulties will be encountered when trying to extract the honey. With good weather in August, the

bees will gather a good supply of winter stores from a variety of sources, and may only require a little feeding of sugar syrup. In a cool rainy August, brood raising is likely to be much reduced, or may even cease, bringing about a shortage of the young bees so necessary for good wintering. The feeding of thin sugar syrup (1 lb of sugar to 1 pint of water) will encourage the bees to continue brood raising. Two or three pints of syrup, once or twice a week during August and the first week in September should help, to keep things going. About the second week in September, the stores position should be assessed, and any deficiency made good by feeding thick sugar syrup (2 lbs sugar to 1 pint water). The amount of stores can be assessed by taking a standard brood comb to hold 5 lbs of stores. The quantity to be provided should be sufficient to last until the spring nectar flow; 40 lbs should be enough.

Consumption of stores during the winter months is small and 15 - 16 lbs might be sufficient to last from October to March, after then the consumption rises rapidly as brood raising begins in earnest. Bees cannot duster on stores, they need some empty comb which is available when all the brood has emerged. This will be in the lower part of the hive, and with a well provisioned hive and a strong colony, the bees are likely to be in contact with the floor with a consequent risk of chilling and interference with ventilation, and is one of the causes of dysentery. It can be avoided by putting an empty super beneath the brood chamber or one having empty combs can be used. Entrances can be left fully open, but mice must be excluded. A strip of perforated zinc or galvanised metal with a bee way of 5/16th in. may be pinned along the front of the hive. Alternatively, a strip of queen excluder can be used.

William Dodd 1977

HONEYBEES AND WATER

Water is vital to bees, who do not store it, but collect it as needed. Water is used to dilute honey / syrup so that it can be converted into brood food, to maintain the high moisture level in the hive necessary to hatch eggs and avoid dehydration of the larvae, and to control the temperature in the hive (by evaporation). Shortage of water, particularly in the spring, can seriously restrict the development of a colony and the honey crop.

Bees collect large quantities of water - 1/3 pint per day, according to one estimate, equivalent to some 6000 foraging trips. They prefer unsavoury sources such as drains, compost heaps and silage puddles, possibly because of trace quantities of minerals that they contain. Usually, water is collected from sources close to the hive. It is possible to persuade the bees to change to a more desirable source of supply by providing a suitable form of drinking trough and initially baiting it with diluted honey; the addition of salt to the water is said to make it more palatable to bees.

Suitable drinking fountains are easy to make. The essential being to provide an alighting area so that the bees can drink without drowning, e.g. by contriving wooden floats, adding stones or straw, making a sandy beach etc. Drinking fountains should not be allowed to become stagnant.

Feeding of dilute sugar syrup in spring (1 lb sugar to 3 pints water) using a small contact feeder is one way of helping the bees by ensuring an adequate water supply for the vital early spring build-up of a colony.

John Skinner 1980 *The Bedside Bee Times*

PROTECT YOUR HIVE FROM PESTS

A hive of honey bees is an attractive target for pests - there are lots of juicy little insects in there as well as a store of highly desirable food. We are fortunate in this country that we have no bears, skunks and other large voracious predators and all we usually have to contend with are wasps, mice and woodpeckers, although rats and badgers can sometimes cause problems.

Wasps may spell disaster for a colony, particularly a small one, in late summer/autumn. Reducing the entrances before the honey crop is removed is essential, as is ensuring that honey is not exposed, or hives open, to attract wasps.

Mice like to go into beehives in the autumn when the temperature begins to fall and can cause havoc. They can be kept out by entrances which are no more than 8 mm (bee space) high (such an entrance can be as long as you like). If the hive entrance is deeper than 8 mm, a mouse guard must be fitted and must be in place before the first frosts. I reckon, as a rule of thumb, to have them in place by 1 October but, when the days and nights are warm and the onset of winter is delayed, bees may be bringing in valuable pollen which can easily be knocked off their legs by a mouse guard. In these circumstances, fitting them should be delayed - all a matter of common sense.



Mouse damage to drawn comb

Bee Stings May Offer ‘cure’ For Cancer

SCIENTISTS in the United States report a breakthrough against cancer, using bee venom to kill rogue cells.

Researchers at **Washington University** in St Louis isolated the toxin melittin, the major component in bee venom, which destroys cells by perforating the cell walls. The experimental treatment was given to mice which had been implanted with human breast cancer cells or melanoma cells to cause tumours.

Researchers found that tumour growth in mice with breast tumours slowed by nearly 25 per cent following the treatment, while the size of melanoma tumours decreased by 88 per cent compared with untreated tumours.

To ensure only cancer cells are affected, the toxin is attached to nano-sized spheres, dubbed **nanobees**, which are geared to target blood vessels growing around tumours and precancerous skin lesions.

As a result, mice which received the treatment had no signs of organ damage, indicating that the toxin did not cause them harm.

Another benefit of the nanobee is that it stabilises the toxin. Melittin is normally cleared from circulation within minutes but was still found to be circulating more than three hours later when secured to nanoparticles, making the treatment more effective.

Dr Samuel Wickline explained: “Melittin is very stable when attached to nanoparticles, as well as being easily and cheaply produced. ‘It remains on the nanobee until cell contact is made, where it pokes holes in their internal structures.’”

Co-author Dr Paul Schlesinger added: “Cancer cells can adapt and develop

resistance to many anticancer agents that alter gene function or target a cell’s DNA, but It’s hard for cells to find a way around the mechanism that melittin uses to kill.

“Nanobees are an effective way to package the useful, but potentially deadly melittin, sequestering it so that it neither harms normal cells nor gets degraded before it reaches its target.”

Publishing their findings in the *Journal of Clinical Investigation*, the researchers claim the treatment may slow the growth and reduce the size of tumours and prevent cancer from progressing from its early stages.

Nell Barrie, science information officer at Cancer Research UK, welcomed the report but warned a bee-sting cure could be some way off: “This research is an example of how nanoparticles could be used to deliver drugs directly to cancer cells without harming healthy cells. But so far this work has only been done in mice and will need to be proven to be both safe and effective in humans before it could ever be used to treat cancer.”

September is a time for drone removal in the colonies !!



“You’re at that awkward age where the others have figured out that you’re a drone and you don’t do anything.”

Active Honey. What is it exactly- apart from very expensive ?

Honey... it's sticky, sweet, soothing and suitably satisfying in your winter warming hot toddy, but honey can provide a lot more than a mere natural sweetener boost. The secrets of Active Honey and its medicinal properties have long been known to the Maoris of New Zealand but CLA Member Captain Tony Spacey has decided that what's good for the Maoris could be good for the Brits.

Tony Spacey's Little Over Apiaries are now one of the country's largest honey producers with a distribution network sprawling nationwide, but considering the perceived limited commercial appeal of British honey. why bees?

Tony Spacey explains: "I went into a barn and saw my grandfather with his arm buried up the rear end of a cow and he turned around smiling and said to me 'some day you can do this'. I was so impressed I joined the army and spent 17 years as a soldier instead. Being shot at seemed preferable." What has this got to do with Bees you ask? Tony explains: "My old man always used to say. you can't escape - you've got farming in your blood, and I guess he was right, but I've managed to avoid cows in favour of bees.

"My family farmed 40,000 hectares in South West Africa but I left Africa and came to the UK. Land is so much more expensive compared to back home and I knew I wanted to get back into farming but I didn't have sufficient capital to buy a farm of the size I wanted. So whilst looking around for farming opportunities I realised honey production could be a viable path to pursue."

Viable it certainly has been, with Little Over Apiaries scooping an array of awards at the food Oscars, the Great Taste Awards 2005, but the real jewel in Tony's honey-

coated crown is his line of 'Active Honey'. Touted as the world's first health food, with its use documented as far back as the ancient Egyptians, it is difficult to dismiss active honey as folk medicine mumbo jumbo. But what is active honey?

Well, all honey to an extent is 'active' (ie effective against bacteria), but most honey loses its active qualities (its anti-bacterial qualities) through the production process. What makes active honey different is that due to the production process. careful storage and extraction methods, the high levels of anti-bacterial qualities are preserved within the honey.

An enthused Tony explains: "Active honey's super food-like properties means it contains some wonderful nutrients and its antibiotic and anti-bacterial qualities have led to medical practitioners adopting the remedy as an alternative treatment for infected wounds, burns and ulcers."

That's all very well but it proved quite a challenge for Tony to introduce the benefits of active honey to the British market: "We went all over the place trying to get advice. We contacted the Honey Packers, the Honey Farmers and the British Bee Keepers asking if they could enlighten us as to what active honey is and why it costs £34 per pound when the average for British honey is £3.50 per pound? Unbelievably, nobody could tell me a thing."

Armed with a lowly scrap of information which said that active honey originates in New Zealand, he despairingly began to email people around the world but was pleasantly surprised at the outcome. "I found the New Zealand honey farmers to be extremely helpful. They told me where to find the research, how it was produced, why it was so good and we went from there. It was truly amazing as they From said they didn't see us as competition. their perspective the more people who are aware

of active honey the bigger the market will become.”

After three years of breeding bees, Little Over Apiaries began trading and the feedback from active honey users would impress even the most cynical of cynics.

“I met an eye surgeon from Sheffield purely by chance and we were talking about active honey. I gave him a jar and said ‘what have you got to lose’.

He began by treating his wife, v is also a doctor. Unfortunately, she picked up a hospital super bug and normal antibiotics had little effect, whereas the active honey proved to be a miraculous success and he now recommends it to all of his patients as pre-op and post-op care.

“In total we produce about 30 different varieties of honey within Britain. That makes us unique and we will be looking to extend our business with the first crop of sunflower honey planned for next year.”•

Tony Spacey: “We produce about 30 different varieties of honey within Britain — that makes us unique.”

FROM THE COUNTRY LANDOWNER

So.....How do bees make honey ?

Honeybees use nectar to make honey. Nectar is almost 80% water with some complex sugars. In fact, if you have ever pulled a honeysuckle blossom out of its stem, nectar is the clear liquid that drops from the end of the blossom. In the British Isles bees get nectar from flowers like clovers, dandelions, berry bushes and fruit tree blossoms. They use their long, tube-like tongues like straws to suck the nectar out of the flowers and they store it in their "honey stomachs". Bees actually have two stomachs, their honey stomach which they use like a nectar backpack and their regular stomach. The honey stomach holds almost 70 mg of nectar and when full, it weighs

almost as much as the bee does. A honeybee must visit between 100 and 1500 flowers in order to fill their honey stomach..

The honeybees return to the hive and pass the nectar onto other worker bees. These bees suck the nectar from the honeybee's stomach through their mouths. These "house bees" "chew" the nectar for about half an hour. During this time, enzymes are breaking the complex sugars in the nectar into simple sugars so that it is both more digestible for the bees and less likely to be attacked by bacteria while it is stored within the hive. The bees then spread the nectar throughout the honeycombs where water evaporates from it, making it a thicker syrup. The bees make the nectar dry even faster by fanning it with their wings. Once the honey is gooey enough, the bees seal off the cell of the honeycomb with a plug of wax. The honey is stored until it is eaten. In one year, a colony of bees eats between 120 and 200 pounds of honey.

Solution

M	P	S	C	D	Y	E	Y	P	H	Q	E	W	Y	S
R	Y	O	A	J	T	F	R	X	D	J	Y	P	X	S
A	B	Z	V	R	Z	L	A	H	L	P	Q	Z	Q	X
W	A	X	S	E	L	B	E	D	N	A	M	S	J	Z
S	B	J	K	P	X	Y	P	X	C	R	U	S	B	F
K	M	N	X	B	E	T	A	A	V	S	T	I	N	G
E	Q	Q	D	E	Z	W	P	P	F	E	G	G	S	
P	C	I	K	N	I	S	A	O	L	J	R	O	T	
L	X	T	N	N	N	R	D	C	Q	P	Y	I	C	
K	H	A	D	E	K	J	M	U	S	T	G	V	T	L
Q	J	D	W	E	H	I	N	G	X	O	Q	Y	I	C
R	P	N	E	S	D	U	W	O	R	K	E	R	L	Q
T	I	S	E	E	Q	V	D	B	N	H	U	A		
U	Q	C	Q	E	E	G	K	X	O	R	X	H	A	
F	R	H	V	Y	F	Y	E	L	C	M	P	X	S	F

ACARINE	DRONE	HONEY
APIARY	EGGS	MANDIBLES
BEE	EXTRACTOR	NUCLEI
BEEKEEPER	FEEDER	QUEEN
BEEsuit	FOULBROOD	SKEP
BEEswAX	FOUNDATION	SMOKER
BROOD	HIVE	STING
		SWARM



Fondant paste
in 15kg cartons
or
Invert syrup
in 14kg buckets
or 900kg pallet tanks
or 18,000kg bulk



For further information contact

Struan Apiaries
Ross-shire Scotland
Tel: 0044 (0) 1349 861427
Fax: 0044 (0) 1349 861802
Email: sales@struanapiaries.com

Aulumgård
Jutland Denmark
Tel: 0045 96412100 Fax: 0045 97471755
Email: mp@aulumgaard.dk
Website: www.aulumgaard.dk