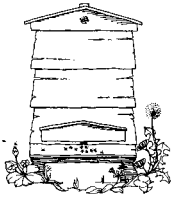

Bee Talk

Newsletter of The Blackburn and East Lancashire Branch of
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What's in this month's Beetalk

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Editorial

2002

TIME FLIES

June already and the major part of swarming for me is over. I was caught out again with a lack of prepared brood frames. I will try to do better next year.

I am sure that you will find articles in this issue of Bee Talk that would have been useful two or three weeks ago. I try to put things in that are relevant to the time of year the booklet is published, but I'm afraid we don't always get it right. So, please make a note of the items you think can be of assistance and save the booklet for reference next year.

MONEY, MONEY, MONEY!

In a personal note to me Jake Windle asked "Why are foundation moulds so expensive, 700 quid in Italy? I have been looking to upgrade my foundation but will stick to my old home made-a la Jack Armistead one. Why are bee suits so expensive in G. B? Sheriffs for example £100 plus. In Italy we can get a nice yellow one for only £34. Funny old world.'"

After reading Jake's note I looked at Thornes catalogue and find a nice foundation mould at £235 which looks a lot of money to me but in Italy, £700! Or are we getting mixed up with Euros?

In the same catalogue I see foundation rollers, one to get the wax to the correct thickness and one to do the embossing, Price ? A mere £1,316 for the pair !! Who on earth buys these things? As Jake says, "Its a funny old world.

MEETINGS

We have quite a few new members this year. Our meetings are well attended, and they seem to be of interest to members, but if you disagree, please say something to a committee member, that is what they are there for.

At the 19th of May meeting at Brian Jackson's David Barrett showed us a red headed drone. In fact it was the eyes that were red, but as a drones eyes are about 90% of its head it looked like the whole head was red. I have never seen any thing like it before. Though I knew what it was, I could not remember the name (so what's new!?). I looked it up when I got home. It is a GYNANDROMORPH an abnormal genetic effect. The book mentioned white eyes, cream, ivory and chartreuse but not red. I know these bees are used for observing genetic crossings but beyond that I know not. Anyway ten out of ten for observation David.

REGIONAL BEE INSPECTOR

Ian McLean has written to us to say he is retiring from his post as Regional Bee Inspector this spring. His letter reads:-

My successor as RBI has now been appointed and I am pleased to introduce Ian Molyneux. He is a keen beekeeper who has been one of the mainstays of the Manchester BKA. He holds the Senior Certificate of the BBKA and is a keen showman. He was a Seasonal Bee Inspector in West Yorkshire and later Merseyside, Greater Manchester & Cheshire.

Recently Ian has been working full time in the Rural Payments Agency and was on Foot and Mouth duties last year. Doug Jones and Stewart Beattie carry on as before and I hope that we will have a new Seasonal Inspector in post to cover the Northeast. Ian's start date in April has not yet been finalised neither has his work phone number, his email address will be i.molyneux@csl.gov.uk and his home address is below. He will have my mobile 07719 924579.

I am looking forward for time to actually take photographs of bees, though most people tell me I will have less time! Thanks for your friendship; I have enjoyed working with you.
Yours sincerely *Ian.*

Ian Molyneux, Northern Regional Bee Inspector
10 Bramhall Avenue, Harwood
BOLTON BL2 4EL

Ian is a member of our own Blackburn society and has addressed our meetings before to day.■

KEEPING IN TOUCH

BOMBUS HYPNORUM

BBC Northern News, at the end of 2001, reported an interesting item concerning a newly-discovered specie of bumble or more correctly-humble bee. It was described as a 'foreign' bee and a short footage of film was shown.

It had been named Bombus Hypnorum and had a brown thorax, black abdomen and a white tail. It looked just like the smallish ginger bees one sees in the garden, apart from, these have black tails.

No one knows how it got here and it is found as far North as the Arctic Circle,"so it is a hardy bee" said David Goulson, of Southampton University of Biological Science. It is good to see an unknown specie appearing when many other species are threatened with extinction through loss of habitat or there natural food source.

WHITE TAILED BUMBLE BEES

Last Summer, we had a nest of white-tailed bumble bees which had made their home under the floorboards at the front of our house, entering and exiting via a ventilator at ground level. They were a talking point, with any one calling on us,

who spotted them taking off and arriving and we were able to give the questioners some idea of the natural history of bees. Though one newspaper delivery lad didn't appear to be able to absorb knowledge and insisted on delivering our newspaper to the backdoor of the house.

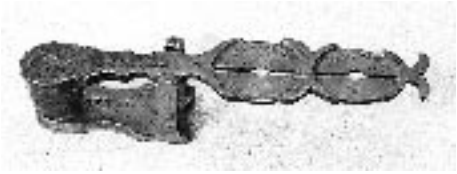
By August, the bees had produced some fifteen beautiful queens. Their flying activity to and from the nest, slowly ended in early October, when they scattered and began to look for places in which to hibernate through the winter, until the spring sunshine and their body-clocks, would awaken them, and many of which will, hopefully by now, have founded their own colonies.

Regards to all

Albert ■

WE HAD ONE OF THOSE . . .

This brass object is about three inches long. It is Victorian or just into the 1900's. Who would use a thing like that? Weavers?; Shopkeepers?, Barbers?; Chemists?



If you saw one on an antique stall they would probably be asking £50 or £60 for it.

By the way, did we ever say where we got the title 'We had one of those . . ." from?

Alan Starkie from Barnoldswick was an actor. He appeared on TV in such things as 'Open All Hours', 'Last of The Summer Wine' - only supporting roles but he turned up on our screen quite often.

When he was 'Resting' he had a stall on the Portabello Antiques market. His trade name was registered as 'We had one of those ! ..... but we threw ours away".

The answer to this issue's little puzzle is on page16. ■

WHERE TO KEEP YOUR BEES

Many of our great cities are bee paradise locations. I am thinking about those in California, particularly, as I know them better than those here. San Francisco has a honey flow year around when the sun comes out warm enough for the bees to fly. San Francisco also has a very good bee ordinance in that you can keep two hives on your property unless a neighbour objects. Those of you who know San Francisco know that there is virtually no open space there, but an acquaintance of mine kept 45 colonies of bees in the city limits.

This beekeeper, Louis Dubay, was a charmer. He charmed everybody. When the city would call him to remove swarms, he would always go. But first of all, he would talk to all the bystanders explaining how important bees were. Then, he would gently remove the bees, talking all the time about how nice bees are and so on and on. Doing this he made friends with all the people in the Highway Department, fire fighters and all other city employees he was called by, to remove swarms.

The mayor of the city, at that time Diane Feinstein, now a U.S. senator, awarded him a plaque which stated that Louis was the city's official beekeeper. Louis took me to a few of his city bee yards, one on a roof, others beside four-lane highways. He would pull off the road and we would walk into an impenetrable jungle where he would have 5 hives of bees. As you may know or suspect, when a city puts through a road, it condemns property and the road takes up most of it. However, little parcels are left beside the new highway. These small parcels are not good for anything, being only a hundred square feet or so, but they were wonderful for Louis to put his bees on. You guessed it, the city road crews would tell Louis about these patches, so he could have another place to keep his bees.

As for you, if you live in a large metropolitan area, go to the city hall with several jars of honey. Ask for the person responsible for city streets and highways. Talk to this person, make friends with him/her, give them one of your honey samples. Turn on your charm and see if you can get bee yards like Louis has in San Francisco.
Steve Taber - The American Bee Journal July 2001■

HONEY& DIABETICS

Honey is composed mainly of a variety of sugars, traces of pollen and water. There are also enzymes present. 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 behaviour between that of cane sugar and the complex sugars in honey is the manner in which the body absorbs them. Sugar 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 overreaction 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 to denote that this occurs 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.
Information from a lecture given By Dr. James Carpenter, University of Hawaii at Hilo.■

THE ITALIAN CONNECTION

Saluti Tutti Ancora De Geminiano.

FROM WINTER TO SPRING

Our long dry Winter (only a dozen wet days in over six months) came to an end in mid April with a week of thunder storms, snow on the tops and hail. And to 'Right the balance' it has been very wet for the last month.

The much needed rain has been welcome for our large re-sown meadow and for all the seeds and plants we had put in all our gardens. Suddenly from being dull brown and arid, the forest clad mountains turned a rich green and grass in the meadows grew waist high in only a couple of weeks.

Plenty for the bees, as first of all carpets of dandelions have given way to meadow blue with meadow clary (savia pratensis) and pink with sainfoin both of them worked all through summer, and just around the corner the acacia trees ready to flower.

MUSHROOMS

On market days in our local town Bardi, the main square fills with all our locals for a good natter and to exchange gossip. At this time of year the main topic seems to be fungi.

With the first warm days, and given a bit of rain, Prunolo (Clitopilus Prunulus) arrived, a much sought for delicacy, quite difficult to find, so our local fungi hunters vie with each other as to who found the first or the most.

I of course join in with my tales and slightly overstated accounts of the amounts we have found. This 'winds' them up no end coming from an 'off cumden' but never the less it is true and we always manage to find a fair amount. The mushrooms have a very strong' perfume' and we have had some good risottos and egg dishes, Jeni has even bottled some under olive oil for next Winter.

THE BEES ARE BUSY

The bees had a wonderful start to the year, very busy from December with hazel, willow and then the tremendous amounts of fruit tree blossom, not just garden trees but also wild cherry, apple and blackthorn that the forests are full of. The build up was so fast that we had supers on by the first week in April.

A local beekeeper told us we were silly and it was far to early, but the bees proved him wrong as by the first week in May the stronger stocks had half full supers of nice pale honey and given a few days of decent sun shine perhaps we can extract some early honey at the end of May this year.

OUR FIRST SWARM

On the 5th of April we were taken by surprise with our first swarm. In over 25 years of beekeeping this one has been the earliest we have ever had. Since then a couple of busy days as three or four swarms have gone of together and twice two of them joining together as they did last year. It saves us work , two in the same box and with a feed we can super straight away! As we promised our selves early in the year we had spare hives, frames, foundation and extra supers ready, even so there has been a couple of panics getting frames wired up and foundation embedded in time for the next swarm!

In February we were disturbed to get a cutting via Jeni's parents out of the Boxhill Observer to say blended honey had been found to contain the antibiotic CHLORAMPHENICOL and all stocks had been withdrawn from sale. Then my mum in Barnoldswick phoned to say the same, and she was having problems finding a decent jar of honey. The problem seemed to be widespread as at Easter a beekeeper we know visited from Switzerland and told us Chinese honey had been taken off the shelves and a panic amongst Swiss beekeepers was going on.

KEEPING IT QUIET

As yet nothing has surfaced in Italy but then knowing Italians it may be that it is being kept quiet! We wonder if this will put people off buying honey or will the demand for all our home grown stuff get better, we certainly hope for the latter.

Now in Geminiano we are looking forward to a good summer and a good hay time that is now only a few weeks away, not to mention the hundreds of the other jobs that suddenly need seeing to. In conclusion we hope that all your bees got through winter as well as ours did. That you have had a good spring and get some decent weather for yourselves, your bees and a good crop of honey.

For the moment

ARRIVEDERCI. Jake & Jeni ■

A SWARM OF BEES IN MAY IS WORTH A LOAD OF HAY

THE URGE TO SWARM

The queen reaches her zenith in egg-laying during the month of May. Swarming is nature's way of propagating the species. The beekeepers aim is to allow the bees to satisfy their urge to swarm while at the same time ensuring that the bees are kept in the apiary for maximum honey production.

ARTIFICIAL SWARM

From about May 10th onwards, brood chambers can be opened and examined for the presence of queen cells. If any are found in an unsealed state it is wise to make an artificial swarm. To perform this operation successfully a spare hive is required.

The brood chamber of such will contain a mixture of frames with new foundation and freshly drawn comb. The operation requires practice. For the less experienced beekeeper, it may be prudent to secure the assistance of an, experienced colleague.

THE OPERATION

The Operation consists of placing the parent hive on a new stand about five feet to one side of its original position.

The spare hive is then placed on the parent stand. The queen must then be located in the parent hive. This should not be a major problem. Should the queen be marked with a spot of white or yellow paint on her thorax she is easily found. It can sometimes be difficult to find an unmarked queen in a hive that is about to swarm.

NEW BROOD CHAMBER

When the queen is located, she and the frame she is on (make sure there are no queen cells on this frame), together with the bees, are placed in the middle of the new brood chamber. Remove another frame of brood on which there are no queen cells, followed by a frame of pollen and a frame of sealed honey. Again, check for queen cells - if any are found, destroy them. Do not remove the bees from these three frames. These frames are placed either side of the frame containing the queen. Fill the remainder of the brood chamber with the new frames. Remove any super or supers from the parent hive together with the queen excluder and place them on the new hive, together with the bees in them.

The population and the organisation of the new hive on the parent stand is like a swarm and the bees are ready to resume their work uninterrupted for the remainder of the season.

A FEED OF SYRUP

They would appreciate a feed of syrup after four days to help draw out the frames of new foundation in the new brood chamber. The old brood chamber with the remainder of the bees is now about five feet away and in direct line with the new hive. The old colony must have the sealed queen cells broken down.

When the foraging bees emerge from the old brood chamber next day they will return with their loads of nectar and pollen to the old location, and enter the new hive where the queen is, thereby building up a strong new queen-right colony capable of giving an excellent crop of honey in the season ahead. The parent hive will continue to complete the remaining queen cells.

AVOID CASTS

To avoid casts it is wise to remove the parent hive to the other side of the queen-right hive, five feet away again at the end of five days. This move ensures that more foraging bees will return to the queen-right colony. The queenless colony will now raise a new queen of their choice. There is no need to break down any unsealed queen cells, as the bees will do that. So we are back to nature's way of doing things.

THREE NUCS

As an alternative the parent hive may be split up into three nucs with a queen cell in each nuc. Two of the nucs are then removed to a new site some miles away and fed with syrup. Do not disturb them for three weeks when all three new queens should be in full lay. The nuc in the old hive need not be removed from the apiary site.

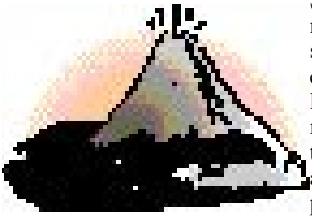
The Irish Beekeeper. ■

BEEKEEPING WITH A VOLCANO

TROPICAL SKIES

Although many may think spending the winter on a West Indian island involves lazing under a tropical sky, sipping rum punch as the sun inks below the horizon of the azure Caribbean sea – well, you'd be right but there's a lot more to being in Montserrat than decadence.

As those of you who have read earlier missives will recall, Montserrat is aptly described as "The Emerald Isle" due to its lush green vegetation. When Christopher Columbus first saw it in the 16th century, it reminded him of Montserrat in Spain, hence its name. It is in the shape of a pear, eleven miles long and seven miles wide but there is hardly any flat land. Its people are very friendly, well-educated and resilient, and have had to put up with some very harsh events.



HURRICANE

In 1989, a hurricane passed right over the top of the island and stripped every leaf from every tree, completely destroyed all the wooden houses and damaged over 90 % of the roofs of the rest of the buildings. It looked the way one might imagine a landscape after a nuclear holocaust. However, these lovely people picked themselves up, rebuilt their schools, roads and businesses and got on with their lives once again.

TOURIST ATTRACTION

Then in 1995, a fissure in one of the mountains began to issue a lot of steam, and scientists warned that a volcano was becoming much more active. Visiting the "souffriere" used to be a tourist attraction as one could see sulphur crystals and feel the hot water in the stream at a site of gentle volcanic activity.

However, the escalation in activity has continued to increase and has resulted in 19 deaths from pyroclastic flows which pour 600 degree clouds of ash and rocks down the mountain sides. The quaint and picturesque capital, Plymouth, is buried, the airport is inoperable and the prime agricultural land, being right under the volcano, is inaccessible – that which is not buried completely. Two thirds of the island, is destroyed, so eight thousand of the original twelve thousand inhabitants have fled, while those who remain have evacuated to the more arid north where they are protected from the volcano by the intervening Centre Hills.

There used to be a thriving beekeeping association in Montserrat. Most of the beekeepers have left and those who remain have lost their colonies and livelihoods and do not have the wherewithal to start again.

GRANT AID

Aha! But! The Department for International Development, are giving a lot of help to the island as a whole, and this help includes a Small Grants Scheme. Through the Montserrat National Trust, I applied for, and received, a grant to resuscitate beekeeping on Montserrat, and part of the project is now in place. It includes a stipendiary to help Lesley Williams build up his seven colonies and increase stocks, money for start-up equipment, educational material etc. Beekeeping is an ideal venture for people who have lost their land, as they can keep bees on the mountainsides, supplementing their meagre incomes.

Lesley lost his 150 colonies just after his village was evacuated, when a pyroclastic flow destroyed them. The rescue helicopter managed to airlift four hives which he has increased to seven stocks but he now works on building sites to keep his family, and has had no time to attend to his colonies. The grant will help him to give time to his bees and by October, we hope he will have enough stocks to give two nucleus colonies to the project and be well on the way to getting himself set up with strong increased stocks. Why don't we just buy in stocks? ***Because there is no Varroa on the island!!!*** This means that we are totally dependent on the island's existing bees, although we should be able to supplement the gene pool from feral colonies.

John, my husband, and I will return to Montserrat in the autumn, when I shall start the beekeeping course in earnest. As a volunteer, I don't get paid for this and the grant doesn't cover everything on the Wish List for beekeepers, so if anyone has any good spare second-hand equipment, this is a worthy cause and any donations to the project would be very much appreciated.

Bridget ■

PUBLISHED BY BBC ON THE INTERNET.

DEVASTATION

British honeybees are facing further devastation as parasitic mites that have destroyed up to 70% of colonies in the past become resistant to the treatments used to control them. Scientists from the National Bee Unit have discovered hives in Devon harbouring pests that can withstand the standard chemicals.

BAD MANAGEMENT

Bad management by bee keepers has been blamed for hastening the appearance of the resistant mites. Experts hope, however, that they still have enough time to develop alternative control measures before the new pests spread across the country.

PERNICIOUS PARASITE.

The Varroa destructor mite was first identified in Britain in 1992, and soon after was wreaking havoc on honeybee populations. At the height of infestation, some beekeepers reported losing almost three-quarters of their bees to the pest.

Are you managing varroa as you should?

Once it has infiltrated a colony, the parasite proliferates by feeding on immature bees, making them susceptible to other infections and shortening their lifespan. The mite is small on a human scale, but to a bee is as big as a dinner plate is to a 1.8-metre-tall human.

Four Varroa Mites

Typically, beekeepers use chemicals containing active ingredients known as pyrethroids to control the numbers of mites in their hives. The treatments are only supposed to be administered for up to six weeks at a time, to limit the chance that the mites will develop resistance.

RESISTANT MITES

However, some beekeepers in Devon are suspected of leaving the plastic strips impregnated with the treatments in hives for months at a time. Richard Jones, director of the International Bee Research Association (IBRA), said it was inevitable that resistant mites would appear eventually in the UK because they had been found on the continent for many years before now.

He said if the chemical strips were left in hives the dose of lethal chemical they contained was diluted and led to mite populations that could survive its effects.

The resistant mites were likely to spread as slowly as Varroa did after 1992, when it was first discovered in Devon, said Mr. Jones. But the picture could be complicated if other beekeepers prove as lax with the treatments as some Devon apiarists.

NATIONAL PROGRAMME

Scientists suspect that the resistant mites have been extant in Devon for a couple of years. The resistant population was discovered in a spot check carried out by a regional bee inspector.

Mr. Jones said the hope was that the resistant mites spread slowly enough throughout the rest of the country to give scientists time to develop alternative treatments. “We’re only going to get rid of mites when we find a biological control for them rather than any pharmaceutical product,” he said. Current promising lines of research involve funguses and pheromone traps.

A spokeswoman for the Department for Environment, Food and Rural Affairs, said a monitoring scheme had been set up to log the spread of the pyrethroid-resistant mites.

***The National Bee Unit** is also giving beekeepers advice about ways to test if their hives are infested with the resistant mites.* ■

HINTS FOR BEGINNERS *by Eddie White*

SUPERSEDURE

This is the time of year for the colony to be contemplating supersedure. Not only is the weather suitable but all the drones have been about for some time. The time is ripe for reading up a little on the subject and reminding ourselves as to when and in what circumstances supersedure can occur. The reasons why a colony replaces its queen are, for the most part well known. However no harm can be done by jogging our memories. There are also some problems associated with supersedure and these need to be highlighted.

A common definition, "Supersedure is the process which the colony employs to replace the queen without swarming" is a bit simplistic. Although supersedure and swarming are sometimes mooted as alternatives, this is not the case.

THE CAUSES OF SUPERSEDURE.

Supersedure may occur for any one of the following reasons or a combination of them. Not listed in any particular order of importance they are;

(a) the queen becomes diseased or incurs an injury,
(b) she is incapable of laying sufficient eggs to satisfy the colony
(c) what eggs she does lay are largely unfertilised, resulting in drones
(d) for whatever reason, the supply and/or distribution of queen substance is inadequate to satisfy the needs of the colony.

This can arise for two reasons,

(I) where the queen is not producing enough queen substance or
(2) there is a failure in distributing it to the workforce.

Whilst both supersedure and swarming are precipitated as the result of the colony's social environment, there is only one cause which is common to both and that is (d) above. As it is the most prevalent cause we will deal with it first. To understand the situation fully, we need to get back to some of the basics, which control colony life. If the honeybee community is to function normally and maintain it's social structures intact, it needs a continual supply of the pheromone known as queen substance The queen secretes this chemical from her glands and it is licked from her body by the workers. It is then passed throughout the colony by a distribution network based on the continual exchange of minute particles of food, which has been adulterated with this pheromone.

TROPHALLAXIS

The process (technically referred to as trophallaxis) is extremely fast, reaching the outer limits of the nest within minutes. If, for any reason there is a failure in the supply or it's distribution, the cohesion of the colony will slowly break down. When that occurs the colony will take steps to replace the queen or issue a swarm. That option will depend on the social environment prevailing at the time.

There are two sets of circumstances, which will deprive the colony of its minimal requirement of queen substance. The first situation is brought about by the fact that, irrespective of the size of the colony, the queen is incapable of producing a sufficient amount of queen substance to meet the colony's demands.

OLD AGE

This fault is normally brought about by ageing. As she gets older her output of queen substance will diminish and by the time she reaches her second birthday it will be reduced to about half the optimum. With the decline, the colony will be stimulated to take action.

Queen cups are charged, a replacement queen is reared and supersedure, not swarming, will normally take place. After the new queen has been mated and is laying, the old one is often relegated to a minor role. Whilst still being allowed to lay, she becomes increasingly isolated and eventually dies, probably from neglect.

TOLERATION

The reason for the colony's toleration of her is unclear but it may be a safeguard, ensuring that there will still be a laying queen, in the event of the new one getting lost or killed on her mating flight. Another reason may be that the new queen does not consider the diminished pheromone production of the old matriarch to constitute a threat. ☛

Old and new can often be found laying in the same colony, sometimes on the same frame.

The second instance results in swarming. It occurs where the queen produces a sufficient, often an abundance of queen substance. Yet through no fault of her own, (but probably that of the beekeeper), the distribution system cannot operate due to congestion in either the brood chamber or the supers, often both. The first type of congestion relates to overcrowding by the adult population. This restricts the mouth-to-mouth contact, which is so essential to the distribution of queen substance. The congestion in the brood chamber relates to a shortage of egg laying space for the queen. Supersedure will do nothing to relieve either of these conditions, there are only two options, either the beekeeper alleviates the congestion or the colony will swarm.

NON-CONGESTED NESTS

Whilst a shortage of queen substance is a common cause of both supersedure and swarming, the previous chapter indicates there is a fundamental difference between colonies that are congested and those that are not. Experiments have indicated that when large colonies are housed in non-congested nests they will opt for supersedure in more than fifty per cent of cases.

The reason suggested for this preference is that it will delay swarming until the following spring. It is based on the premise that, with a new queen at its head, the colony's chances of successful over-wintering are greatly enhanced. The minimum capacity of the nests used in this research was eighty litres or more. Small colonies in nests of less than forty litres will, for the most part, swarm. We have clear evidence to support the latter in the nesting size and behaviour of the smaller colonies, which inhabit the tropics.

NOSEMA

Disease is rarely the cause of supersedure. Nosema is probably the best example as it is present in a minor degree in most colonies. Injuries are also an uncommon occurrence although fighting between virgin queens may result in the deterioration in the health of the survivor. Mishandling or careless manipulations by the beekeeper are probably a more frequent cause.

Any shortfall in egg production will affect the long-term survival of the colony. It depends on the fertility of the queen for the propagation of its workforce and if there is an unseasonal decrease in egg laying the colony will take steps to supersede her. The most common cause of this deficiency is ageing, the older the queen becomes the less prolific her egg laying. There are exceptions to the age rule. Young queens, which have not been properly mated or suffer from injury or some abnormality, will be superseded.

DRONE LAYER

A shortage of sperm will result in the level of unfertilised eggs reaching an unacceptable high level. Any queen suffering from this problem is commonly referred to as a "drone layer". She will be replaced by supersedure. Swarming does not come into it.

We have some idea as to the main causes of supersedure but what factors can be ruled out? Congestion for one, only swarming will relieve this condition although the beekeeper may pre-empt it occurring by providing more space or removing some of the brood. Another cause that can be ruled out is the sudden death of the queen. Or her loss from the colony as a result of a mishap on a mating flight or flying off when the hive is opened. The colony's only remedy in these circumstances is to rear a new queen. They do this by building emergency cells, details of which are provided below.

IDENTIFICATION OF CELL TYPES

Workers build two distinct types of queen cells, one, which functions as an emergency cell, the other for supersedure or swarming. As the name implies, emergency cells are the product of a crisis in the colony, where the queen is dead or missing.

EMERGENCY CELLS

Worker larvae, three days old or less, have their diet changed to royal jelly. In preparation for the increased body size of these potential queens, workers modify and enlarge the cells.

Identification of the emergency cells is easy; they are unique in shape and cannot be mistaken for swarm/supersedure cells. The enlarged portion takes the form of a right angle, parallel to the face of the comb and pointing downwards. As they originate from worker larvae, they can only be found within the brood nest. Emergency cells are few in number and, being on the face of the comb, can easily be missed. Nurse bees tend to cover them, together with all the brood. There is no physical distinction between swarm ☛

and supersedure cells as distinct from emergency cells. They both have their origins in queen cups. Supersedure cells tend to be located in the middle of the nest and usually number about five or six. Swarm cells are more numerous and are generally located at the edges and bottom of the nest. The numbers and locations quoted are a general guide only; much will depend on the size of the colony and the race of the bee.

FREQUENCY OF SUPERSEDURE

The frequency may be influenced by the length of the nectar flow. Long periods of nectar flow puts a continual pressure on the queen to lay eggs. This takes its toll by condensing her egg laying endowment into a shorter time span, thereby increasing the prevalence of supersedure. In our climate, the band when supersedure can occur safely, is roughly between the end of May and early September. If it occurs any later in the year it may rule out the possibility of successful mating. The presence of drones are obviously a pre-requisite.

OTHER POINTS

When a swarm occurs and becomes well established, it is virtually certain to replace its queen by supersedure. Every queen should be marked and every beekeeper should be aware of the age of their queens. Failure in this may allow supersedure to occur without the beekeeper being aware of it. This can present dangers if, for any reason, re queening is attempted. One warning sign would be when there is (or was) an old queen in the nest and plenty of brood exists.

It may indicate that supersedure has already occurred and the abundance of brood is the result of laying by the new queen. Any attempt at re queening would result in one of the new queens being killed. It also follows that queen cell destruction as a means of swarm prevention can, albeit rarely, backfire. If the colony intends to use the cells for supersedure and not swarming, their destruction may retard the development of the colony. Colonies which are under strength with ageing queens at their head, are prime candidates for supersedure.

There will be a gap in egg laying as a result of spring supersedure. This can adversely affect the colony's build up and its ability to collect the honey crop. It is yet another justification for planned re-queening.

Eddie White from The Irish Beekeeper +

ENTHUSIASM

Basically, if every bee in the world was wiped out, we humans would have about 60 years left on this planet," says Hamill. "Crops wouldn't get pollinated, birds would die out through lack of seeds - it would be the beginning of the end."

As well, as saving the world, bees create a product which, according to their misty-eyed keepers, not only tastes delicious but cures sore throats and miraculously heals open wounds. Talk to any apiarist and they are full of the altruism of the average worker bee. By contrast though, they become distinctly waspish when the conversation turns to mass produced, super -market honey. They talk scathingly about how it contains honey not just of more than one flower but of more than one country. And how it has been boiled (to reduce water content) and therefore depleted of goodness and flavour.

As for their own product though, they speak of it with lyrical appreciation. "Texture, colour, clarity, flavour - there are so many different characters to look for, " says Hamill. "Once they're hooked on good honey they start to treat it like good wine. +

HONEY AND HEALTH.

The following advice was given by BUPA in a recent issue of their publication 'BUPA News':-
Although honey contains many enzymes, vitamins, minerals and amino acids which your body needs, you should use it in moderation as it contains lots of sugars, which should not make up more than 10% of your total calorie intake.

If you have a sweet tooth, its antioxidant properties - which eliminate potentially damaging free radicals - make it a healthier alternative to sugar in food and drink. Some studies suggest honey should not be given to babies under the age of one because it can contain the spores of the bacterium Clostridium botulinum, which produces the toxin which causes botulism, These spores are harmless to older children and adults because they cannot survive the acid of the gasstro-intestinal tract.

From Northamptonshire BKA's Bulletin courtesy of the Bee Editors Exchange Schemes BEES +

WEIGHING BEES from an article written in 1945

WEIGHT GAIN

By weighing my bee-hives this year I found that one gained as much as 7 Ib. in a day, but it was exceptional. Next day the weather broke and the combination of good weather and good blossom did not recur for two months.

Generally the hives gained about 4 Ib. each of the good days. Unfortunately last year there were very few good days, and by weighing I found that four bad days undid the work of one good one. The season started too well. Up to May 15 except for the first few days of May, the hives were gaining so fast that I thought I should become short of supers. Then the weather became cold and stayed bad for most of the next two months. The bees had to live on their stores and it was not long before I was removing superfluous supers.

BAD WEATHER

This must have been one of the worst bee seasons for many years. *(1945! ed)*

Excluding the syrup fed to them, on balance my bees showed a gain of only 3 Ib. a hive over the season March to September. This was not due to losing swarms or to weak or divided stocks but just to bad weather at the critical times.

I hoped my weighings would show me which of the local nectar crops were the best, and how the hives gained and lost during the year, but I suppose it will be several years before I can make a valid comparison. I did find that a wintering hive ate a pound of food a week while a hive with a laying queen ate as much in a day.

From these figures I found by weighing this autumn that my hives settled down to winter rations at different dates spread over the fortnight between September 9 and 24, for around these dates the weekly fall in weight dropped to about 1 Ib. each.

ABOVE SEA LEVEL

The hives are some 250feet above sea-level in Cheshire. They are near a small river running through meadow land but are separated from it by a belt of deciduous woodland. (Three years ago I had a swarm 40feet up one of the beech trees.) There are almond and fruit trees in the neighbouring gardens and plenty of hawthorn in the fields. I found that on the good days when the almond, sycamore or lime were out the hives increased in weight very fast, and nearly as fast when the fruit blossom was out The bees had only just started to work the Hawyhorn and the Clover when each time the weather broke. A change of weight often showed me what was the state of a hive without having to open it. The weighing was done easily and it never appeared to disturb the bees except when I was clumsy.

It was done with a pre-War Woolworth's spring balance. The balance hook was tucked under the ledge at the front of the lowest brood box of my W.B.C. hives and the balance slowly raised till the front of box was supported by it. This repeated at the back.

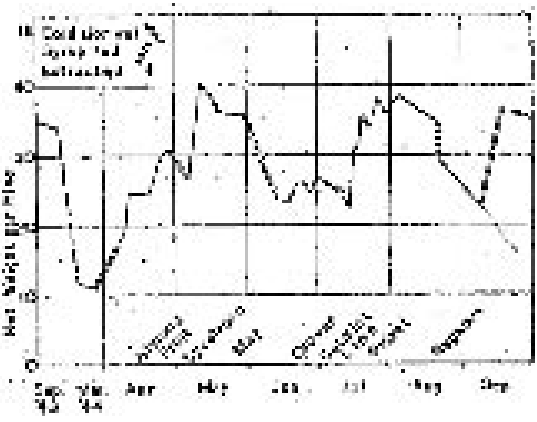
The two added together were the weight the brood box, supers, bees, honey, etc. From this figure the weight the boxes, combs, etc., was subtracted to get the net weight of the bees, brood and food.

CHECKING THE BALANCE

I have checked the balance and the method and the weighings appear correct to the nearest pound. The graph is the record of the average net weight of bees, brood and food in my hives during a twelve month period.'I hope some day to fix up a continuous weight recorder and to compare the results with temperature and humidity records.

J. M. Preston, B.Sc.

Taken from "The Countryman" Spring 1945 +



VAROA MITE COUNT FROM TWO ADJACENT HIVES

Some interesting figures on Varroa. Take a good look and then let me know how you interpret the figures.

In the week leading up to March 30th 2002 I counted a drop of 2 mites each day from hive D27. The hive was then treated with Bayvoral. Since then this stock has had no further treatment. The next day, as can be seen on the graph, the mite count rocketed to 184 drops the next day. For the next fortnight or so the count remained in double figures or more.

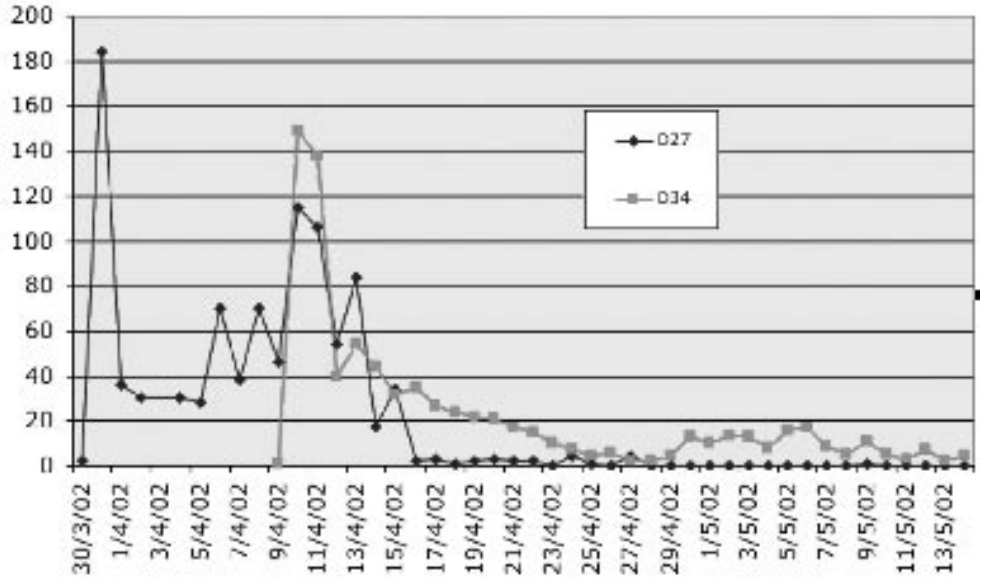
On April 9th stock D34, which is right next to D27, was treated with Thymol. The next day, brood was thrown out by the bees in hive D34, I assume as a result of the Thymol treatment. The mite count can be seen in the graph.

Very intriguing figures for hive D27 can also be seen in the graph. The day after treating the next door hive, D34, with Thymol, the mite count in stock D27 climbed from 46 to 116, it then fell quickly to double figures then to single figures, then to zero. The questions in my mind are:-

1. Why is there at sudden leap in the D27 count after introducing Thymol into a nearby hive on April 9?
2. After about April 17th there were few or no mites in D27 but the treatment of Thymol in D34 appears to be less effective.

Please take a look at the chart and give me a ring if you want more information or if you have any ideas. We will show the result of your collective thoughts in the next issue.
Bill Ainsworth +

VARROA MITE COUNT FROM TWO ADJACENT HIVES.



RECIPES

SMOKED BARBARY DUCK

During my recent visit to Durban to attend the Apimondia conference, my husband and I booked to have a Honey Lunch at the Durban Hilton. The menu was devised by the hotel chef. The meal was delicious and afterwards we were given the recipes for each course. So below is that for the starter.

Ingredients

400g smoked breast of duck,
lOOml honey,
50ml soya sauce, 2
4 cubes of melon
4 leaves Oak leaf lettuce,
8 leaves rocket,
4 leaves Lollo biondo & rosso lettuce,
8 cherry tomatoes,
tablespoon snipped chives,
25ml sherry vinegar

Method

In a saucepan bring to boil soya and sherry vinegar and add honey, whisk to incorporate and allow to cool. Add snipped chives to the cool marinade. Finely slice duck breast lengthways. Brush glaze/marinade onto a clean plate and lay duck breast in an overlapping style. Brush more glaze over top. Arrange lettuce and salad on top of duck, drizzle with a salad vinaigrette and serve. These quantities should serve 4 people.+

PEANUT BUTTER CANDY.

Ingredients:

1 cup honey,
1 cup / crunchy peanut butter,
1-1/2 cup powdered milk,
1-1/2 cup sesame seeds.

☛

Method:

Mix together honey and peanut butter. Stir in powdered milk and sesame seeds and knead until well mixed. Shape into roll and slice. Wrap and store in refrigerator.

From American Bee Journal.+

TE FREDDO OR COLD TEA

1 Organic lemon sliced
1 or 2 tea bags. depending on type and taste
2 table spoons of honey
2 ltrs. of water

Put all the above in a saucepan and bring to the boil. Leave to cool, then strain into bottles and put in the fridge. This recipe can be varied with herb-teas. really quick and easy to do and very refreshing when you are hot and tired.

Jeni Windle (Italy).+

MEAD

Mead is basically honey fermented in water with some sort of flavoring added, although it can be made with maple syrup in lieu of honey. There are literally hundreds of variations, but one thing they all have in common is that mead requires at least one year aging in the bottle before it even begins to taste good. After two years, it will be great. After three years, it will be fantastic. I don't think any mead has ever survived four years. It simply gets consumed somewhere between "good" and "fantastic." Here is a recipe that will offer insight into experimenting to create your own recipes. You can use various flowers, berries, extracts, spices, fruit, etc., but remember that mead must be aged a year.

Lavender Mead (1 gallon)

* 2 lb honey
* 1 pint lavender flowers
* 1/4 tsp citric acid
* 1/4 tsp tannin powder
* 1 tsp yeast nutrient
* Champagne yeast

Boil 1/2 gal water and add honey, stirring to mix. Pour hot water over all dry ingredients except yeast. When water cools to lukewarm, add remaining water and sprinkle yeast on top. Cover with cloth and ferment 7 days. Strain out flowers and transfer liquid to new container. Fit airlock. Ferment 60 days and rack. Refit airlock and allow to sit another 60 days. Rack into bottles and allow to age one year.

[Adapted from a traditional recipe]+

The Ken Preedy Memorial Apiary

HOLDEN CLOUGH VISITS FOR 2002

Anyone wishing to help or even just watch will be made most welcome. They should, however, contact the 'Duty Manager' for the day in question to find out what the situation is and times etc. Casual visits without making contact could prove to be a waste of time.

DUTY MANAGERS

Bill Ainsworth	01282 614015	Ken Gaiger	01282 778887
Michael Birt	01706 222849	David Bush	01200 428152

SCHEDULE OF VISITS TO HOLDEN CLOUGH FOR 2002

June 9th	**Ken Gaiger**	**June 23rd**	**Michael Birt**
July 6th	**David Bush**	**July 20th**	**Bill Ainsworth**
August 4th	**Ken Gaiger**	**August 18th**	**Michael Birt**

PROGRAMME OF EVENTS FOR 2002

DATE	TIME	VENUE	ORGANISER	SUBJECT
Sun 16th June	1pm	Towneley Hall	John Zamorski	Annual Open Day
Sat 13th July	8am	Messrs Thornes	Michael Birt	Branch Visit (See Page ?)
Sun 18th Aug.	2.30pm	Michael Birt's	Bee Inspector or Bridget Beattie	Something on Beekeeping
Sun 22nd Sept.	2.30pm	Angela Moyle's	John Zamorski	Barbecue (Bring your own drinks!)
Sun 6th Oct	2pm	Castle Cement	Pauline Roberts	Honey Show & Auction
Wed 6th Nov.	7.30pm	The Brewery	Michael Birt	AGM & Discussion

NOTES ABOUT THE MEETINGS

Towneley Hall Open Day

Well it's here again. The annual event that seems to be getting bigger, lets hope better. The day is Sunday 16th June, the time 2.00pm. We should be set up by 1.00 pm if anyone wants to come early to help or just watch. Bring your family and friends and have a good day out. Entrance to the Hall is free and there is a nice little café if you want a meal or just a coffee. If weather permits the Towneley Bees will be opened so bring your gear. This year the day will be held in the Regency Room of the Hall and not The Natural History Centre. I look forward to seeing you there to help promote our great hobby to the public.

Sunday 18th August

Please note the change of venue. As yet we aren't sure if the Bee Inspector will with us and Bridget is standing by in case. A very good day in any case.

Sunday 22nd September

A get together with a Barecue. Food provided and cooked by John Zamorski. DON'T FORGET TO BRING YOUR OWN DRINKS!

IT PAYS TO ADVERTISE !!

Place an advert in BeeTalk and contact beekeepers World Wide (Well!, Jake's in Italy, Bridget's in Montserat and Albert's somewhere off Manchester Road)

Full Page £14 Half Page £8 Quarter Page £5

(It helps to pay the postage on BeeTalk)

From The Treasurer

Subscriptions for The Association are £11 for a full member and £2 for each additional family member.

BEE DISEASE INSURANCE COSTS ARE AS FOLLOWS

UP TO	**5 HIVES**	**£1.80**
UP TO	**10 HIVES**	**£4.20**
UP TO	**15 HIVES**	**£6.00**
UP TO	**20 HIVES**	**£7.20**
UP TO	**25 HIVES**	**£7.80**

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

SWARM COLLECTORS

Beekeepers prepared to collect swarms

Blackburn, Darwen & Mellor	**Robert Fulton**	**01254 772780**
Clitheroe	**John Zamorski**	**01200 427661**
Ribble Valley	**David Bush**	**01200 428152**
Nelson and Colne	**Bill Ainsworth**	**01282 614015**
Padiham	**Ken Gaiger**	**01282 778887**
Barnoldswick and Earby	**Ian Dent Willoughby**	**01282 814374**
Accrington and Burnley	**John Wison**	**01254 886120**

INFORMATION ABOUT 'BEETALK'

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March 2003 June 2003

LATEST TIME FOR COPY IS TWO WEEKS BEFORE THE MONTH OF PUBLICATION.

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

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'

MAKE A VERY SPECIAL NOTE !!

Our Honey Show is on Sunday 6th October and we really do need you to take part, let's make it the best ever. Very soon after is the Lancashire Honey Show. We did very well last year - let's do even better this time round.

Please! Please! have a word with Pauline Roberts on 01282 438615.

Scrapings

The Milk Marketing board man came in by the little-used front door of the farm house. business done, The farmer's wife suggested that he leave by the more convenient back door. "Oh, no" said the man, "I could not", I am a Dorset man, and we are superstitious. I must go out by the same door that I came in.

An English Language Professor wrote the words "Woman without her man is nothing: and asked his students to punctuate the sentence correctly. The male students wrote:

"Woman, without her man, is nothing.

The female students wrote:

"Woman Without her, man is nothing.

From a fruit growers diary *(1920's Ed.)*.

"The grand child will soon be three. Inquiring for her nurse the child was told she had gone home to dinner. " Blast the girl!" exclaimed the infant, " I never had my bike ride".

I have cautioned her mother."

Beekeepers Quarterly is an excellent journal, full of useful information for all beekeepers. It is available at a discount from our Secretary. Please contact ????? on 01254 ???????

At the entrance to the beehive a number of honeybees perform guard duty. Their function is to protect the hive and it's store of food against predators. All comers are inspected and on the basis of whether they are friend or foe, the visitor is admitted, or sent packing. Here the intelligent honeybee examines the visitor, and on the basis of her assessment of the information thus obtained, decides to admit or reject the visitor. On the other hand, drones are kicked out in autumn. It would seem that the honeybee is in this case acting instinctively.

The catenarian "wild" comb with it's hexagonal wax cells is a marvel of construction. Mathematical studies have shown that it is most economical in terms of the use of space and materials. We have no evidence that older bees show younger bees how to build comb. So we conclude that this is indeed an inherited trait and that honeybees build comb instinctively. No doubt in the distant past honeybees developed the process and that this became heritable.

Bees! Bees! Hark to your bees
Hide from your neighbours as much as you please
But all that has happened, to us you must tell
Or else we will give you no honey to sell.
A maiden in her glory
Upon her wedding-day,
Must tell her Bees the story,
Or else they'll flyaway,
fly away-die away
Dwindle down and leave you,
But if you don't deceive your Bees
Your Bees will not deceive you.
Marriage, birth or buryin',
News across the seas,
All you're sad or merry in,
You must tell the Bees.
Tell 'em coming in an' out,
Where the Fanners fan,
'Cause the Bees are just about
As curious as a man!
Don't you wait where trees are,
When the lightnings play,
Nor don't you hate where Bees are,
Or else they'll pine away.
Pine away-dwine away
Anything to leave you!
But if you never grieve your Bees,
Your Bees'll never grieve you.
THE BEE BOY'S SONG by Rudyard Kipling

The 'We had one of those . ." on page 2 is a sovereign scale. This was in Victorian and Edwardian times when a pound was worth a pounds worth of gold. There were many forgeries so these scales were used to ensure the right weight and thickness of sovereigns and half sovereigns - a bit like the thing they use alongside the till these days to check for forged notes. The only realy difference is the technology.

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

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