



Bee Talk

Newsletter of The Blackburn and East Lancashire Branch of
The Lancashire & North West Beekeepers Association
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EDITORIAL

JUNE 2003

Nelson Tue. 27th. May.

DON'T KNOW WHICH WAY TO TURN

Three weeks of very poor weather after the most beautiful early Spring I can remember. The bees that got through the Winter built up beautifully and just when we get to the most difficult bit, swarm time, the weather goes sick and a beekeeper of many years standing is reduced to a dithering, "Don't know which way to turn" tyro. But with a bit of luck we will get through



Whilst I'm thinking, don't forget if you deal with a swarm as you should - you know - put the swarm back on the original stand and give the supers to the swarm. You have taken all the foraging bees and the stores away from the SWARMED stock and there are a lot of mouths to be fed, so if you do not feed it in four or five days they will undoubtedly starve, especially in the sort of weather we are having now.

FERMENTING

I had a lot of problems with some of my heather honey last year. Unbeknown to me, after pressing out the combs and storing away in buckets the stuff started to ferment and it was a long time before I noticed it. In the end I managed to stop the fermentation by heating it. It was no longer a saleable item but would do to feed back to the bees after Winter, what a lot of work for nothing!



It was all due, of course, to extracting unripe honey. The point of this belly aching is as a warning to you. Do the extraction properly this year extract all the unripe (uncapped) honey first to be fed back to the bees, then extract the ripe honey with confidence, it will keep for ever! Well at least a long time !

FROM SIMON TIMEWELL

I received the following note from Simon Timewell of Downham

Bill,

Being new to beekeeping, I wondered if anyone who reads BeeTalk might be able to explain bee behaviour I observed recently in the garden which, to me at least, appeared unusual. What was going on? Several "guard" bees hovered about 5 feet above the ground in a line between the hive and a gap between the house and a

garden wall. To me they

appeared to be waiting

for returning or maybe

marauding bees coming

toward the hive. At



various intervals one of the "guard" bees would grab hold of a "marauding" bee and hold on in mid air for several seconds. This went on for quite some time. What on earth were they doing?

I think you might have seen a couple of over sexed drones, mixed up between worker bees and Virgin queens. But then, what do I know about these things. Any better ideas out there?
Ed.

MICHAEL COSTELLO

In the last issue of BeeTalk I asked who took the photo on page 9. It was Michael Costello from Leyland. Well done Micheal! Keep them coming.

HOLDEN CLOUGH

is going well. Good tempered dark bees and the stocks we managed to get through the Winter seem to be strong enough. However, we do need volunteers to help with, painting the hut, cutting grass, the gate wants hanging the other way round, etc. etc. Is there any one out there? Ring Michael, John, Ken or myself, we need your help.



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'

KEEPING IN TOUCH

PRAISE

It's good to note that our own Bee Talk, continues to maintain a high standard, packed with interesting articles and snippets garnered from many sources which are added to by a variety of enthusiastic writers both from the home area and fields afar; a sort of collect the best, condense and carefully filter and so what you bottle can't be bad. In addition, much effort goes into the production of Bee Talk and for this, we must thank Bill, Arthur and Michael .

IMPROVING QUALITY

And now Bill has come up with what appears to be a good idea, which might prove to be not only an interesting long-term exercise, but also one containing much interest with the possibility of widening the horizons of beekeeping. Bill, as you may have read in Bee Talk, March 2003, is suggesting that we might take a look into the possibility of improving the quality of the bees in our hives.

In some respects, we might not find this too difficult and it certainly would provide much interest. To this end, we have the beginnings of a quest which originally was sparked off a few years ago when the following was discovered.

A colony of bees was found in a wall at Fountains Abbey in Yorkshire during work to repair a crumbling wall. When the bees were removed, they were seen to be dark- coloured and after morphology measurements had been carried out, it was discovered that this was a surviving colony of native British bees. Their purity of race, it was suggested, was because they were in an area completely isolated from any other feral (wild) colonies.

After this "find", for some time, the writings of beekeepers discussing and arguing the case for and against the Old English Bee as it was better-known, filled the pages of the then British Bee Journal.

Some of the characteristics of the Old English Bee was that it built a pure white comb, was very docile though given more to swarming than its contemporaries. It was said to over-winter on less food than other breeds and because of its blackness, it was able to forage at a lower temperature than others, resulting in much less spring-dwindling. So all in all, without much argument, it would seem to be a better bee than some of to-days bees.

ISLE OF WIGHT DISEASE

It had been thought that the O.E. bee had been wiped out after the onset of the acarine epidemic, or, as some called it, the Isle of Wight Disease, having first been reported there.

Following the outbreak it quickly spread to most parts of Britain, hives were reported as being black with crawling bees unable to fly. This happened after World War One. However the immediate area around Burnley, Nelson and Colne was little affected and an old-time bee keeper, Alan Sharpe, from whom I learnt the rudiments of bee keeping in 1932, said his bees had come through without any visible effect. Incidentally, several diseases which have ravaged more Southern parts of the country, have not even been detected in these parts, due probably to the area having a much smaller population of bees with consequent less movement of them through sales and absconding swarms.

Regards to all. *Albert Morris.*

WE HAD ONE OF THOSE!

Probably dating from the late 19th century with a horn covered handle and steel blades. This looks as though it was used for bookbinding - or perhaps a Tanner used it. Maybe it was for trimming the waxed parchment as used by lamp makers. Give Albert a ring - he's sure to know. If not, take a look on page 10 where you will find just who did use it and what is was used for.



NORTHERN BEE BOOKS

Over the past fifteen years or so we beekeepers have had tremendous support from Northern Bee Books. We would like to thank them by publicising their Website www.beedata.com
The postal address is:

NORTHERN BEE BOOKS
SCOUT BOTTOM FARM
MYTHOLMROYD
HEBDEN BRIDGE HX7 5JS
'PHONE 01422 882751

By the way, their publication
BEEKEEPER'S QUARTERLY can
be obtained from our treasurer at a
concessionary rate

CALLING ALL EXPERIENCED BEEKEEPERS.

**Are you prepared to help a beginner
during their first couple of seasons?**

**The idea was mooted again at the AGM
that it would be of great assistance to
beginners to have a 'mentor' or someone
more experienced to call upon for advice.
Obviously it would be easier if both
parties lived reasonably close to each
other although often all that is wanted is
simply someone to talk over problems on
the telephone.**

**If you would like to assist new beekeepers
in this way, please give your name and
phone number. to Bill Ainsworth on 01282
614015. He can then flag it up in Bee Talk**

**This idea is not new, but it would be nice
to get it up and running. If you are a
beginner, here are one or two names for
starters:**

Michael Birt 01706 222849 (Rossendale area)
Bob Fulton 01254 772780 (Blackburn area)
John Zamorski 01200 427661 (Clitheroe area)
Ken Gaiger 01282 778887 (Burnley area)
Bill Ainsworth 01282 614015 (Nelson area)

THE GOOD OLD DAYS

The article in this issue of Bee Talk comes from a publication called "Bees, Honey and Beekeeping" dated 1938 and published by The Scottish Beekeepers Association. I will finish it off next time.

Few realise that there are found in Britain over two hundred species of "solitary" bees that never form colonies, which disappear annually after a brief period of active life, being represented for the most of the year by their offspring, which carry on the race in the form of eggs, grubs or pupae.

Typical representatives of this class are the leaf-cutter bees, which burrow into friable banks, filling their tunnels with "thimbles" made of leaf cuttings, cunningly fashioned into cells, which are provisioned with a paste made of honey and pollen. Each thimble contains an egg from which will hatch a grub that will in due course become a perfect winged bee, male or female as the case may be for there is no "worker" caste as in the honey and bumble bee.

The big bustling humble bee is more familiar to most people than any other bee. They are also "annuals" because only the Queens survive the winter; retiring for hibernation to safe retreats underground, generally in banks facing northward, so that they may not be prematurely aroused from their winter sleep.

Handsome, powerful, sagacious and competent are these humble Queens, very different in instinct, appearance and capability from the highly specialised Queens of the hive bee. The Queen of *Bombus lapidarius*, for example, resplendent in rich fur coat of jet black relieved by bright orange on the tail, makes her nest, collects a lump of pollen, stores a wax cup with very thin honey, and then lays a clutch of eggs. She broods over these like a hen, leaving them only on the height of the day, when she goes out to replenish her honey pot. The grubs lie together until they are full-fed and full-grown, after which each makes a separate cocoon in which it pupates. After the fully developed worker bees emerge, the vacated cocoons are used to contain honey or pollen, for the humble bee never makes any comb.

*To be continued.
John Zamorski.*

PORTRAIT OF A BEEKEEPER -and his wife

THE WEAVING WINDLES

I was born in Barlick into a family known as the Weaving Windles, as mum and dad had a small mill of thirteen looms producing silk and cloth. I was brought up in Earby and schooled in Salterforth and Barlick. I was always close to nature, mainly at the wrong end of a game keepers shotgun!



After schooling my feet began to itch and I spent a few years getting to know most of Scandinavia, all of Europe and a bit of North Africa, ending up working for a year in the South of France on a fruit farm saving Francs for a trip east. Here I met two old beekeepers who brought hives for pollination to the orchards and who also brewed some very strong cider. Seeds had been sown but stayed dormant for another couple of years, my interest in bees was put on one side as I stuck my thumb out and went overland to India.

Back in England I found myself living in Colne. I met Jeni who for some reason had moved from Sussex and who put lead in my boots. Soon we had a large allotment growing things organic with quite a bunch of small animals. I had a workshop that grew from Antique restoration to exporting, did a lot of climbing, walking and for a few years we got involved with the rare "logger head turtle" project in Greece.

I BECAME AN 'EXPERT'!

Those seeds I mentioned germinated and with the space we had, it was time for a hive or two. I got all the books I could find and was soon an "expert", bored all our mates stiff and then I went on the hunt. I tracked down a chap near Lancaster after being told he had two stocks of bees for sale for almost nothing. A pal and his Landrover were press ganged into assisting, and one evening took off for the bees.

Yes two hives with bees flying, both with supers on and a very old assortment of gear. More holes than in a veil. The chap would not go near them saying he was allergic to stings - odd I thought! Tying the hives up I stuck a bit of newspaper in the entrances and off back to Colne at dusk. Half way home the Landrover was full of bees, big holes in the floors. Back home there was a need for a brew or something "stiffer" and wait for them to go back into the hives on their own.

FROM 'EXPERT' TO 'FOOL'

A mistake as even more "escaped". I decided to go for it and get them on stands and did my first bee dance in the dark with a torch and various onlookers running about every where. I waited a day or so and let them settle down, read another book or two on the next steps to take, Jeni fixed the holes in our protective gear and we were ready for our first look at our own bees. A puff of smoke from the old copper smoker, roof and crown board off. In seconds I was demoted from "expert" to "fool". Not a frame in the hive, brood box full from top to bottom with natural comb. Same with the second hive and that's when I realised why the chap said he was allergic to stings.

BAD TEMPERED

Two very bad tempered stocks and both of us with lots of stings but at the time thinking this was normal, not knowing the difference between calm bees and ones with a temper. So what to do? Nothing in the books about all this. But close at hand a knight in nearly shining armour. Our future (tor)mentor, Mr. Jack Armistead,

I did head this little missive, "Portrait of a beekeeper and his wife" . . . so in the next Bee Talk Jeni can take the helm.

Best wishes Jake.

BRITAIN IS PROBABLY COLDER THAN YOU THINK!

THE ARCTIC CIRCLE

Along a line from Lancaster to Scarborough the reported average July lowland temperature is 15°C (59°F). South of that line it rises toward



20°, but northwards it drops toward 10°. The NW half of Ireland also has a mean July temperature below 15°, while on the continental mainland the 15° line runs northwards just east of the Norway-Sweden border, crossing the Arctic Circle in Finland.

VIRTUAL EXTINCTION

Over most of their present ranges the Carniolan and Caucasian bees of Eastern Europe live at the temperature of southern England, while Italian and Greek bees bask in temperatures that may exceed 25°.

But North of the Lancaster-Scarborough line we might expect all races of *Apis mellifera* except *Apis mellifera mellifera*, our native Northern European dark bee, to have serious problems in survival. Some exotic foreigners survive in Southern Britain, albeit with varying degrees of assistance, but there they have contributed to the virtual extinction of A.m.m. by crossbreeding

It is no accident that the focus of BIBBA consciousness is in the North Midlands: while this is probably the northern limit for unassisted survival of exotic honeybees, occasional colonies of pure natives can still be found there.

BAD NEWS

The bad news is that undesirable foreign genes survive in mainly aggressive interracial hybrids wherever bees have been imported.

The good news is that our optimism over survival of genetically pure native honeybees can justifiably rise as we travel north.

BREEDING FROM LOCAL BEES

The policy of BIBBA has always been to breed from local bees. This policy has not always been followed, but the practices of breeding groups should be seen in geographical context. Half of the 16 groups I contacted when preparing this report propagate honeybee stocks developed from local sources. However, this has proved impractical in many regions where they have instead resorted to importing *mellifera* queens, mainly from Ireland.

In Devon the colony development pattern of *mellifera* bees imported from Northern England proved too tardy for them to exploit the clover harvest. Unsurprisingly the primary breeding objective of most groups is docility, followed by hygienic behaviour, honey yield, low swarming tendency, prolificacy, over-wintering, longevity and low temperature foraging.

GOOD BEES

Breeding "groups" vary in size from one to 20 individuals, with an average of 3-5. Their activities include beginners' courses in general beekeeping, classes in morphometry and queen rearing, identification of authentic A.m.m. colonies, establishment of isolated mating apiaries, instrumental insemination and importation of mated queens. Good bees are distributed to group members, neighbouring beekeepers and occasionally to distant groups, as eggs, larvae, virgin and mated queens.



Extract from "BEE IMPROVMENT"
Dorian Pritchard BIBBA

THE ITALIAN CONNECTION

GEMINIANO. MID FEB.

Cari Saluti da Noi Geminiano, early May.
For some unknown reason we had somehow managed to get ready for a new beekeeping year, more second hand hives, a batch of new ones with the now standard varroa mesh drawers, a few hundred brood and super frames wired up and plenty of foundation on hand.

But the weather had different ideas. In February with the willow and hazel catkins about to mature, the Blackthorn, Apricot, Almond and Peach all in flower, came a month of average minus 6°c every night which put an end to early pollen gathering.

36 HOURS OF SNOW

Easter came early this year with more of the fruit trees in blossom, plum, cherry, pear and more peaches, but thirty six hours of wet heavy snow and one more night at minus 6°c destroyed the lot. The Kiwi leaves turned from fresh green to brown in hours and the opening walnut flowers dropped off in the next couple of days.

Then, suddenly it was spring and the last two weeks of April stayed fine and hot. Time for our first inspection, over two months behind last year! Out of our seventy five stocks two did not make it, plenty of stores but no explanation as to why, perhaps queen failure.

One big surprise after such a long winter was 90% of the hives needing supers straight away. Our hives are mostly 12 frame, almost modified Dadent, monsters compared to the nationals of GB and as yet in Italy we have never had to feed our bees for winter as it is easy to leave 60lbs of honey in the brood boxes without limiting space for the Winter cluster, even so another surprise was to see plenty of old stores inside, after a long seven month Winter.

A BIG NECTAR FLOW

Soon the meadows filled with the first big nectar flow Dandelions, hectares of them, what we call the yellow period and in a good year honey in the supers, slightly strange taste and quick to granulate, this year it has all gone into the brood boxes with the bright yellow pollen. The bees deciding they need it more than we do. Now as I write, the rest of the fruit trees are all in flower. Apple, cherry, plums with lime

and acacia and the meadow flowers getting it together as well. Seven swarms so far - so much for this year's swarm control system! At least our pre-season work of new earthquake proof stands made of breeze blocks and angle iron will come in handy for the extra stocks.

With so many hives about the house it is time to start thinking of out apiaries. Lots of Italians who buy our honey have said we can put hives on land they own and with hundreds of square miles to go at the choice is not as easy as we would like to think it is. The mountains are steep and good places difficult to get for inspections every couple of weeks. Wild boar can do a lot of damage at one sitting not to mention heavy beaked woodpeckers and light fingered Italians, but I'm sure we will get it together at some point soon.

Over the last few weeks we have had Italian beekeepers turning up for advice on oxalic acid and thymol treatments. Most of them have lost all there bees over the Winter. Some even giving up the idea of ever keeping them again - all seem to try Perizin and Apistan a few times and can't seem to accept the idea of Pyrethroid resistant mites, that have been around in Italy for the last dozen years, though the Italian government info tells them about the organic acids that are still working in varroa control. Expensive insecticides still win!

Never mind, in a way it is good for us as the demand for our swarms seems to be growing. We always treat them while they have no eggs being laid. They are then of to a good start, it helps pay for the new gear. On the land we are just about keeping it together with most things down and planted before the return to Winter at Easter and so long as the frost stays away we may be able to feed ourselves again this year. The grass is growing strongly and by the time this gets into Bee Talk we will be getting our first cut of hay into the barn and the Summer honey flow will be on. It will be too hot to work and hard to keep the wine cool. Geminiano will be filling again with the second home owners from around the world.

So for now from us both, lets all have a good beekeeping Summer and perhaps even some honey.

Sauti tuth. Jake and Jeni

COMB HONEY PRODUCTION

Most beekeepers at some time in their career try producing sections, by the traditional method. This usually fails as it requires considerable skill and know-how and is dependent on the right conditions to produce, needing a very good honey flow at the right time.

CUT COMB METHOD

A much more reliable technique is to use the cut-comb method. Although not guaranteed to be successful, it is economical because it does not require any special equipment. Ordinary shallow frames are fitted with half a sheet of thin unwired foundation. This leaves the lower half of the frame empty and provides a clustering space for the bees. The lower half of the comb is often built as virgin drone comb which looks even more attractive. These frames are placed in the second or third supers, one on either side of the centre comb.



There is a strong likelihood of getting pollen in them if the first super is used. The top bars of these frames should be marked with a felt pen to remind you what they are, so that they can be put on one side when the supers are taken off, and not extracted by mistake. Special plastic boxes are available to pack the cut comb pieces. To cut the comb lay it flat on a

clean surface, and using a sharp knife, cut the comb out of the frame. Cut the comb into pieces to fit the boxes using a box as a template.

NET WEIGHT

To achieve neat edges to the cuts, lay the edge of the knife on the comb surface and press down firmly - do not use a sawing motion. If the combs are not fully sealed, select only those areas which are sealed. The unsealed portions together with any off cuts should be processed as cappings by whatever method you normally use. These cut combs make delightful gifts, but if they are sold, they must be labelled with the words cut comb honey'also the net weight and your name and address.

OFFICIAL - HONEY IS GOOD FOR YOU

Scientists in the United States have shown that drinking a mixture of honey and water increases the antioxidant content of blood. These antioxidants, which are also found in fruit and vegetables, neutralise damaging molecules known as free radicles which are believed to increase the risk of cancer and heart disease, and are implicated in the ageing process. Darker honeys contain more antioxidants than lighter types. It has also been discovered that mead contains a similar amount of antioxidants as white wine, but less than red.



Honey and cider vinegar makes a healthy bedtime drink; mix with hot water according to taste. Try it, it's much nicer than it sounds.



AGED BEE FACTOR

The worker population, which goes with the swarm, are primarily flying bees, i.e., workers 10 or more days old. Because of this "aged bee" factor, those who go must do that "trick" of rejuvenating their aged brood food glands to feed the first generation of new bees and so build the hive and restore the balance of ages for the new colony. Thus it is reasonable to speculate that swarming was a contributor to building this rejuvenation factor into the species since it is seen nowhere else among other genera of bees.

INTRODUCTION

Throughout the centuries during which mankind has been associated with bees, few activities have attracted so much attention among both beekeepers and non-beekeepers as swarming. It was the great unknown mystery of the honeybee. Two questions plagued the beekeeper for centuries and there is still some doubt today as to the correct answers. What drives the colony to swarm and, can swarming be controlled? In pursuit of the answers to these questions and many others enough myths and suppositions were created that the retelling of them would fill a sizeable book. A great deal of what we know about swarming, has come through in the last 60 odd years. Prior to this, knowledge of swarming had hardly change. Many studies in these recent years aimed to answer the basic questions and by doing so proved the falsity of many traditional answers. Not withstanding that, some of these old beliefs are still held as "Articles of faith".

NOTE. For the greater part of this article the discussion will be about the "prime swarm". This is the first swarm of the season to issue from the parent colony with a fully mated queen.

WHAT IS A SWARM?

The correct definition of the word swarm is; "a colony on the move". The bees in a hive or nest is a colony (having colonised the hive/nest) and they are NOT a swarm.

The swarm consists of

1. The old queen,
2. About half the workers,
3. All the food they can carry and
4. Some drones (who are quite unnecessary but seem to get caught up in the excitement and go along for the ride).

SELECTION

We must now digress a little to explain how the selection is made as to what workers will go with the swarm and who will remain. The queen mates with many drones, generally 8 or so. Her progeny are therefore a collection of half sisters, or in other words there are 8 or so groups of full sisters, the progeny of each drone. Although there is some mixing of semen it is generally conceded that the progeny of the various matings comes through in a reverse order to which the queen was impregnated. It follows, therefore that if one of the drones had a genetic composition which predisposed his progeny to swarm, and given all the other physical pre-requisites to swarming, then the colony is most likely to swarm at that point when that drone's progeny is dominant in the colony. This point of view is still open to further research. However observations to date seem to indicate that a genetic factor is strongly at work, and it can be reduced by selective breeding from non swarming strains.

WHY DO BEES SWARM?

Swarming is present in all races and strains of bees as an inherent behaviour. This means that although its frequency can be reduced by selective breeding no amount of "management" or "control" will stop it happening at some time or another. Just as the laying of eggs and rearing of brood is a form of replacement of bees and increase in colony population, so swarming is a form of replacement and natural increase of the species in a given geographic area.

FIVE COLONIES

Let's assume an area, which can support five feral colonies, over many years. Eventually one may die out due to disease, another may have its nest destroyed by physical forces and

perhaps another may be predated by animals. There are now only two colonies left and there is nothing to stop them suffering the same fate. But, there is also now an abundance of food and these surviving colonies can build large populations and sooner or later overcrowd their nest capability. In these circumstances nature makes provision for the continuation of the species by encouraging the surviving colonies to split in half and send out a swarm to replace the lost colonies.

REPLACEMENT

It does not necessarily follow that these swarms will exactly replace the lost colonies. In fact some may go outside the geographical area into new environments, which demand a new set of genetic characteristics to survive. What happens now is that either the swarm cannot cope with the new environment and dies or it makes a quantum leap in its genetics and adapt to the new environment. This adaptation factor has occurred on thousands of occasions and over such a period of time, that new species have evolved and within each species many varieties have also emerged, each tailored to suit the new environment. Many attempts have been made to breed swarming out of the bee species. Indeed, it has been postulated in recent years that *Apis mellifera mellifera* having been selectively bred by man for many thousands of years are already relatively “non-swarming” compared to other sub-species such as, *Apis mellifera scutellata*, which is notorious for its swarming frequency. Temperament is also thought to be related to swarming. Thus, “non-swarming” bees are often alleged to be very quiet bees.

THE SWARMING SIGNS

There are several signs that the colony will swarm in the months/weeks/days ahead. Drone rearing is only indicative of swarming at the start of the season. It begins upwards of three weeks before a swarm leaves. This ensures that the new queen has drones of mature age ready to mate when she achieves ideal mating age. Once started, drone rearing is more or less continuous throughout the productive season, and can no longer be relied on to indicate swarms, but it tells us they have swarming in mind.

OVERCROWDING

This is a more typical signs of swarming. It does not mean that every cell has to be completely filled with either brood or honey.

But, the certainty that at the rate that honey is coming into the hive and brood is being squeezed into an ever decreasing area is a sure sign. Deposits of honey in brood cells that are newly vacated clearly indicate that the brood nest is being restricted and overcrowding is starting to have an effect.

PROVIDING A CLUE



Up to now the swarming impulse is probably very weak and can be “broken” without serious difficulty. But, once swarm cells are created there is virtually no turning back. Swarm cells are cleaned, re-furbished and

made ready for the queen to lay in. Often new cells will be rapidly built around the perimeter of the brood nest, on the edges of combs, along the bottom bar, or near the end bars. From 2-10 swarm cells (average about 5-7) are usually laid within a 2-3 day period.

These are the most certain sign that a colony is due to swarm. Swarm cells also provide a clue as to the precise time the swarm will issue. The swarm will almost invariably issue within the last 2 days of pupal development. So, if the oldest swarm cell is discovered at the 4th larval day it is highly likely that the swarm will issue in about 7 days.

If the colony has access to two brood boxes queen cells will very often be found along the bottom bars of the upper box. If queen excluders are used over a single brood box the cell will be found nearer the centre of the comb.

The old queen, will depart with the swarm. Why this is so has not been explained conclusively. Suffice it to say that she will cease laying a day or two before departure to make herself lighter for the flight. During this time she may be very hard to find since she will be small and often “hides” among the workers. However lots of brood and no eggs is a very real warning that something is afoot.

To be continued in the next issue.

QUEEN INTRODUCTION

MIGHT APPEAR CRUDE

A method of queen introduction I learnt over the dinner table at the Gormanston convention that might appear crude but works well and is as follows.



The young queen is in a nuc, usually four frames plus frame feeder and is placed beside the full colony to be re queened. The full colony's supers and excluder are put to one side and the brood chamber plus floor to another side. A fresh floor is put on the original site then on top a framed queen excluder.

EMPTY SUPER

An empty super or brood chamber is placed on the floor and then another empty brood chamber. The frames of the nuc are placed as a block into the upper brood chamber at one side. The brood frames of the full colony are removed one by one, their adhering bees thrown onto a sheet in front of the boxes on the original site and are placed in the upper box along with the nuc.

DISORIENTATED

In this operation a compliment of frames must be selected to discard so as to allow for the added frames of the nuc. The original queen excluder is replaced and the supers go back on top. The dislodged bees from the brood frames return through the bottom excluder in a somewhat disorientated state and join the nuc bees peacefully and re-cover their own brood.

BEE'S BEARD

Bees can form a beard below brood frames so the extra super or brood box is to prevent such a beard reaching through the bottom excluder and contacting the old queen if she makes it back through the entrance.

FRESHLY HATCHED BEES

The end result is peaceful acceptance of the new queen; the old queen perishes through isolation. I leave the set up until the next visit when bottom excluder and the extra box is removed. A disadvantage is that freshly hatched bees tend to be unable to find their way back so give them every assistance but some will perish. But as I don't see the hive for a week, the robins have cleaned it all up before my return. Not needing to find the old lady makes this a practical way to re queen a bad tempered lot.

*By Ben Harden Co. Wicklow Ireland
From: The Beeholder Spring 2002*

WE HAD ONE OF THOSE !
Think back to the TV programme. "All Creatures Great and Small". Robert Hardy would have had one of these in his pocket when he went to visit one of his patients on a Yorkshire Dales farm

It's a bleeding knife! No, we aren't slipping into bad language it is a fleam which was used by vets or horse doctors to bleed sick animals.

One of the blades placed on a vein in the neck and a sharp tap on the back of the blade

KILLING THE GOOSE

If it's a bad parasite that kills its host then why do varroa mites kill honeybee colonies so effectively? This is an interesting question that is often asked and there are two basic elements to the answer. The first is that the varroa mite is no longer attacking its original host. The natural host of the varroa mite, the Asian Hive Bee or *Apis cerana*, has been evolving together with the varroa mite for many millions of years and so they have come to live in a balance with each other as hosts and parasites normally do. The Asian Bee has a variety of defence mechanisms developed over the millennia so the mite cannot develop in sufficient numbers to cause any real harm to the colony.



WESTERN BEES

The situation is entirely different for our own Western Honeybee (*Apis mellifera*), which just has not evolved any defences against the parasite. The second reason is that the varroa mite seems to have overcome the problem of killing its host by changing the bees behaviour.

When a colony becomes so badly infested with varroa mites that it is about to collapse the bees just seem to lose hope. They can't be bothered to protect their hives and they let robber bees in. The bees seem to sense that their colony is doomed and when the robbers go home they take some of the other bees with them until gradually almost all the worker bees have gone to a new hive.

HITCHHIKERS

The bees all take a load of hitchhiking mites with them since by this time there is very little live brood left for the mites to breed in. It has been estimated that up to 60% of the mites survive the collapse of the colony this way and they have also managed to spread themselves out very effectively. In fact, it is not really in the mites best interest for the colony to survive since they would spread out more slowly.

Over the millennia Asian bees have developed a vigorous grooming ability that enables it to kill any mites on adult bees. For mites breeding in the cells, life is no easier. The Asian bees won't allow any mites at all to develop in worker brood and this seems to be the nub of the difference between the two species. Finally, the wax cappings on the drone cell are so thick that only the strong mandibles of the drone inside are capable of chewing through it to set itself free once it hatches. If the drone pupa dies because of large numbers of varroa mites in the cell then the workers can't uncap the cell to clean out the dead drone. Consequently, the mites become entombed in the cell and die too. This means that cells containing large numbers of mites cannot be opened and so takes those mites out of circulation.

TOLERANT BEES

Of course I hear you say, if *Apis cerana* can develop defences against the mite then it should be possible for us to breed a varroa tolerant bee that can live despite being infested with the mite. This is not an idea that has escaped attention and there are scientists all over the world busily pursuing this goal. However, despite fifty years of this work we don't seem to be much nearer to a solution. Scientists have looked at the ways other races and species of bees have resisted the mite. They have looked at reducing the time the workers and drones take to hatch but found that to reduce it to the level where it would reduce the varroa's ability to breed would also damage the bees development.

GROOMING

Many people looking at grooming activity to see if this can be improved have found that it forms only a small aspect of resistant behaviour. Another study looked at what would happen if all the bees showing some signs of resistant behaviour were put onto a Mediterranean island and just left to it to see if resistance might be forced more quickly. (Since I knew the researcher who proposed this idea I did offer to help look after the bees on a nice sounding island!!) There has been a lot of examination of African bees that were thought to be naturally immune, to see if they could uncover any reasons for this. All this has given a lot of scientists a lot of work and research ideas and the full and complex picture of varroa/honeybee interactions and biology is only just beginning to be unravelled.

From the Cheshire Beekeeper Spring 2002

HISTORY OF SOAP

The Romans are generally credited with being the first to develop soap. One interesting theory as to how soap was first discovered is based on the women in Rome who would wash their clothes at the Tiber River, at the bottom of



Sapo Hill. Sapo Hill was known as a famous worshipping site, where a variety of different temples were housed. Legend has it that as the animals were sacrificed at the temples, the ash from the fire and the grease from the animals ran down the hill to the riverside. These are the basic components of saponification - or the chemical reaction that occurs during soapmaking. The women that washed in that section of the river quickly noticed that their clothes were cleaner than anyone else's and thus began the life of soap.

(How's that for a story ? Ed)

IT'S EASIER NOW !

Thankfully, though, we have a much easier time making soap in the 21st century! We don't have to wait around by the edges of rivers and wait for temple drippings from above. With a minimum investment you can create high-quality bars of soap

ONE METHOD OF SOAPMAKING

This is the real way to make soap, from scratch. If you're willing to invest a little more time and energy into the process, you can learn a fascinating craft.

This soap uses both honey and beeswax has a great scent and colour when completed. You don't need to add any additional fragrance to this soap but you can if you choose to.

You may want to try a few sample batches first. to get the hang of this soap making technique.

OLD-FASHIONED HONEY SOAP

12 oz vegetable shortening
4 oz coconut oil
1oz beeswax
1 cup distilled water
2 oz lye
1/8 cup (1 fluid ounce) honey

Combine the lye and water, and let cool.

Melt vegetable shortening, and put aside.

Over a double boiler, melt beeswax and coconut oil together and keep warm.

When the vegetable shortening has reached 120 degrees and the lye mixture is 100 degrees, then pour the lye mixture into shortening and stir until tracing occurs.

(Tracing is a term used to describe the thickness of soap when it is ready to be poured out into moulds. Check for tracing by running a spoon through the top of the soap. If it leaves a 'trace' of a line, you're ready to pour.)

Pour wax and oil mixture into soap mixture, and stir constantly.

This mixture will get very thick once you've added the beeswax mixture. When completely blended, stir in the honey and pour out into moulds.

Unmould the soap after two days. Allow your new honey soap to age for at least three weeks before packaging.

PACKAGING

A simple but elegant way to package your soaps is by wrapping with tissue paper, and then sealing with a label or seal.

CONCLUSION

Soapmaking is a fun hobby for anyone - but for beekeepers it's just one more way that you can use honey and beeswax in a new way. Most people who love to eat honey will also love it in soap form.

From Bee Culture March 2002

THE OPEN MESH FLOOR

From the very beginning I accepted the belief that bees needed top ventilation and, being naturally obedient I religiously placed perforated zinc or wire gauze over the feedhole. Equally religiously, the bees gunged them up immediately. Naturally enough, I figured that bees are extremely stupid creatures not to know what is good for them and I could not help but marvel that they had managed to survive as long as they had without our help.

Consider, if you will, just how long bees have survived without our help; a mere 345 million years, that's all. Winged insects made their appearance during the Carboniferous Period and, having nothing else to do but evolve into various species, did just that, taking advantage of whatever habitat was available. The insect that became the honeybee decided, very wisely, that in a world consisting of nothing but seas and trees, a hollow tree, of which there was no shortage, would be the ideal residence. Over the following 100 million years or so the partnership of insect and habitat evolved very



neatly and by the time the dinosaurs had come and gone, the bee/tree relationship was truly settled, an arrangement that suited them both down to the ground. So it continued up to the Holocene Period which began a mere ten thousand years ago and during which certain ape-like creatures began to learn to cultivate plants and domesticate animals.

Being the adaptable little critter it is, the bee accepted man-made dwellings (not having much option, as men cut down the trees) but being told to accept top ventilation was too much. Hollow trees have no ventilation at all, other than what comes through the front door. What the bee wants most of all at the top is warmth and if the air gets too fuggy well, what are wings for?

LORDS OF CREATION

So the question arises "Why do these new, two-legged Lords of Creation insist on top ventilation in their wooden hives?" and the answer is "To let out the moisture laden air which condenses on the crown board, drips onto the outside combs and causes mildew and mouldy pollen. But does it? It lets out air, certainly but it is the dry, warm air which escapes. The heavier, moisture-laden air is driven to the outer parts of the brood chamber

where it either hangs about on the combs or flops onto the floor and mixes with all the frass and detritus to make a thick, soggy goo that the most hygienic bees cannot shift. And there it sits and mopes until the floorboard is changed.

Now this, if you have bothered to read so far, is where the logic of the open mesh floor comes in, in as much as it simulates the conditions existing in hollow trees - where they still exist, that is. In the non top-ventilated tree, the moisture-laden air driven to the outside is assimilated by the tree, leaving the air both warm and dry. Any detritus is either too far below the combs to matter, or dry enough to be removed by the bees. This is also what happens with the open mesh floor.

GLASS CROWN BOARD

In evidence, I offer the following observation. At the end of September, having fed all my colonies, I found that one, although strong, was queenless and I decided to unite it with another. This I did and, when I examined the OMF I found it to be as clean as when the hive had first been assembled. Now, I must make it clear that except when monitoring for varroa I do not use a tray below the mesh. In consequence, there is nothing between the bottoms of the brood frames other than the wire mesh throughout the year. I keep the glass crown board on all year too but keep the feedhole covered except when feeding. This enables me to examine the hive without losing any of that precious warm air. I have also noticed that, except in extremely bitter weather, the cluster is more open than with top ventilation and I assume that the colony also consumes much less of its food reserves to keep warm. At the end of October I shall put a two-inch thick square of polystyrene over the crown board and, apart from giving them a dollop of bakers fondant as a Christmas Treat, shall leave them in peace until that first inspection in Spring - when I know that the OMFs will be as clean as a whistle as usual.

My reason for removing the varroa screen tray after monitoring is because that becomes gunged up too and is a wonderful place for wax moth larva to flourish as well as still alive varroa mites which could possibly get back into the hive. As it is, and because the hives are on rails well above the ground, they have no chance. Well, there it is. That explains why I hold the opinions I do. The bees are healthy, and that's what matters.

*With thanks to The Beeholder, Montgomeryshire
BKA Newsletter*

SCHEDULE OF VISITS TO HOLDEN CLOUGH DURING 2003

DATE DUTY MANAGER

June 8	Ken Gaiger
June 22	Michael Birt
July 6	John Zamorski
July 20	Bill Ainsworth
August 3	Ken Gaiger
August 17	Michael Birt
August 31	John Zamorski
September 7	Bill Ainsworth

TELEPHONE NUMBERS

Bill	01282 614015
Ken	01282 778887
Michael	01706 222849
John	01200 427661

From The Treasurer

At the County AGM in March it was agreed to increase capitation from £1.50 to £2.50 per member. This is the first increase from County for many years and became necessary to ensure long term survival. Income has fallen in recent years due to falling membership elsewhere in the County. Costs have been reduced, (particularly with the handbook) but even so, bank resources have steadily been eroded.

Providing our AGM agrees, the branch subscription will need to rise from £13 to £14 for the year beginning November 2003. Other rates should remain unchanged.

As stated previously, our branch subscriptions are the lowest in the County and probably in England, with all the basic subscription going to insurance, L&NWBKA and BBKA.

The branch's income is raised from gift aid donations, raffles etc. Hope the above news is not too distressing.

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

First 2 hives	£1.50	covered by subscription
up to 5 hives	£2.25	
up to 10 hives	£5.25	
up to 15 hives	£7.50	
up to 20 hives	£9.00	
up to 25 hives	£9.75	

Above 25 hives see the Treasurer.

**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**

ARE YOUR HIVES VARROA FREE?

Scrapings from hive floors can be sent to :-
Diagnostic Services
National Bee Unit
Sand Hutton
YORK
North Yorkshire
YO4 1YW

They will send you a report and the service is free of charge

MEMBERS SERVICES

Bayvoral	£3.10 per pack
Thymol crystals	£2.20 per 100 g

**Beekeepers quarterly Annual
subscription of £14.00 instead of normal
£18.00.**

**Talk to Ken Gaiger phone. 01282
778887.**

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

**Our librarian, John Zamorski brings
some with him to our meetings. Contact
him on 01200 427661 for special
requests.**

COMMITTEE MEMBERS CONTACT DETAILS

Michael Birt	Chair	01706 222849
Bill Ainsworth	Vice Chair	01282 614015
Angela Moyle	Hon. Sec.	01200 445398
Ken Gaiger	Hon. Treas.	01282 778887
Pauline Roberts	Honey Show Sec	
	Home No.	01282 438615
	Work No	01282 698119
John Zamorski	Librarian	01200 427661
Robert Bradshaw	Member	01254 261216
David Bush	Member	01200 428152
Barry Mellers	Member	01282 612985
Joe Wrigley	Member	01200 447621
John Tracy	Member	01204 394558

IT PAYS TO ADVERTISE !!

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

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

(It helps to pay the postage on BeeTalk)

INFORMATION ABOUT 'BEETALK'

Planned Publication Dates: September 2003 December 2003 March 2004

LATEST TIME FOR COPY - 2 WEEKS BEFORE THE MONTH OF PUBLICATION.

Please contact Bill Ainsworth, 296 Scotland Road Nelson BB9 7YS Telephone 01282 614015 .

Good, crisp photographs or line drawings are always welcome

PROGRAMME OF EVENTS

DATE	TIME	VENUE	ORGANISER	SUBJECT
Sun 22nd June	2.30pm	Towneley Hall	John Zamorski	Branch Open Day
Sat 12th July	8am?	Thorns	M Birt	Coach trip
Sun 17th Aug	2.30pm	Michael Birt's	Ian Molineux	Disease Update
Sun 21st Sept	2.30pm	Angela Moyle	Angela & John	Barbecue

NOTES ABOUT THE EVENTS.

June 22nd is the date of the annual open day at Towneley. There will be lots of visitors who will want to see the best of beekeeping. John has the event in hand but will need the assistance of all members. Do try and be there.

A trip to Thorns is planned for July 12th.. Start approximately 8 pm home at about 7pm. The trip was much enjoyed by all last year, and the price of equipment has to be seen to be believed,. You can easily save on the cost of the trip by being able to buy cheaply. There will be speakers to hear and workshops to visit. Michael Birt thinks the cost will be about £15 but ***he needs to know*** if you intend to join us. Ring him on 01706 222849 Bookings cannot be accepted after July 5th.

On August 17th Ian Molyneux talks about Disease Update. We will ask him to expand on the talk he gave at Brian Jackson's.

The barbecue on September 21st is at Angela Moyle's at Twiston. The barbecue should be held outside and will be unless September weather tells us different. in which case there we will eat inside. So don't worry about the weather.

Again numbers will need to be known by Angela and John so ring John on 01200 427661 as soon as you can. He has to arrange the food! John thinks there will be a small charge this year to help with costs, probably 50p. per person. Kids will go free.

PROBLEMS AND SOLUTIONS WITH NEIGHBOURS

A SMALL GARDEN

When I first started beekeeping I had a tiny garden and the neighbours were very close. They expressed some nervousness - especially when errant foragers mistook their bedroom lights for the sun, and flew in through open windows to investigate.

But the bees learned quickly to get on with the people next door and a pot of honey the next year clinched the matter. Although the garden was small, trellis work and creepers on one side and a thick Forsythia hedge on the other forced the bees to ascend and descend to the hive entrance more like helicopters at a landing pad than jumbo jets on a flight path at Heathrow.

SWEET TEMPERED BEES

Neighbours may not only dread being attacked by bees but may also have an irrational fear of all creepy-crawlies.

The urban beekeeper can avoid annoying them by following certain guidelines: keep sweet-tempered bees (and that has a lot to do with the temperament of the queen); site the hives so that bees fly higher than eye-level over the neighbours' gardens; don't open the hive on a Sunday afternoon when next door is in the garden and, most important, control the swarming instinct.

1. FEAR OF STINGS & ACTUAL STINGS:

Many people have an irrational fear of insects - particularly the stinging sort. They need to be reassured that the bees will not go on the rampage and you need to ensure that your bees are not vicious.

Do not open the hive when the young couple next door are sweating it out in the sun, bare-fleshed and anointed with Ambre Soleil; or having Sunday drinks on the lawn - especially if you have some big manipulation to carry out.

The more your neighbours flap around the more likely they are to be stung by the bee that is investigating them. If they are stung, be profuse in your apologies and generous with your honey. Keep a stock of Piriton antihistamine tablets to hand out.

2. RE-SITING THE HIVE:

If the problem becomes endemic, and although your bees are well-behaved the neighbours kick up a fuss, you can offer to re-site the hive either to another part of your garden or to an apiary elsewhere. Sometimes just adding trellis to the fence and growing creepers over it, thus making the bees fly high, solves the problem. But it's better to do this before the neighbours, or their children or pets, get stung.

3. DONATING HONEY:

If you make it a custom to give honey all round every season, your neighbours are less likely to object to your bees. Some of them may even come back for more once they have tasted the difference between your honey and the imported, blended stuff

4. HONEYED WORDS:

Talking about the bees, their social behaviour and how they benefit farmers and gardeners educates people to become less fearful. Children are often fascinated and much less afraid than their parents.

AFTER THOUGHT USING "WAVE CLOTHS"

You might like to try this suggestion from two American beekeeping brothers. The idea is to use 'Wave cloths'. Erect two post for a clothes line or make a sort of gallows almost directly in front of the hives and from this rough arrangement hang your oldest smelliest clothes, perhaps using metal coathangers to make a kind of scarecrow. The more movement and smell the better. The bees won't like it but eventually they will get used to both and stop bothering you. Failing that the standard answer to bad tempered bees is to requeen.

After, after Thought!

If you would like a copy of BeeTalk to read on your computer screen AND if your machine will accept PDF files. Email me at arthurbick@btinternet.com and I will send this issue as a sample and future issues as soon as they are printed



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