



The **Apiarist**

... High Weald Beekeepers' Newsletter

Chairman's Chatter

Hello everyone. Welcome to my first Apiarist article as Chair of the Association. When our fantastic Apiarist editor Paul asked me if I would continue Pete's tradition of writing something for each newsletter, I of course agreed – without thinking through what I was actually going to say! I read through some of Pete's previous offerings to try and get inspiration, and eventually settled on a little bit of business, and a little bit about me – for the vast majority of you that don't know me that well.

Starting with business: since I took over from Pete in November, I have chaired one committee meeting, and attended a couple of SBKA meetings, including their AGM a couple of weeks ago. At our own meeting, we mainly focused on our plans for the coming season – the Beginners' course, our plans to run queen rearing sessions with a couple of our extremely knowledgeable and enthusiastic members, although we also talked about ideas for talks we could arrange for the wider membership.

If you have any ideas about speakers you would like us to consider, please let Talha Dinc or Helen Searle know. (email the.hwbka+events@gmail.com).

During the SBKA meetings, we have mainly spent time arranging the SBKA AGM, the Heathfield Bee Market which will be going ahead in May, and the SBKA Autumn Convention.



Jo Gore is the new chair for HWBKA.

The SBKA AGM was a bit of a revelation. Firstly, it was so poorly attended, which is a shame as there was a really interesting talk from Vince Gallo about how bees build honeycomb, and the biological imperatives that drive them to build the shapes they do. There was also a fantastic amount of extremely delicious cake – laid on by Brighton & Lewes Division, who were this year's hosts. It is not our turn to host for another couple of years, so you all have plenty of time to hone your baking skills! Secondly, when it came to voting in a new Chair, who should step up to the plate but our very own Pete Coxon – clearly Chairing our Association for the last 4 years has given him a taste for it! You have all heard the saying about asking two beekeepers a question and getting

... continues on next page

IN THIS ISSUE

ARTICLES

Chairman's Chatter	1
Book reviews	2
The Calm Queen Project	3
DIY – Wasp guards	5
Three Bees – episode 10	8
Latest committee meeting	10
Contacts	10

FORTHCOMING EVENTS

Most "live" events are still cancelled until further notice. We will try and arrange seminars via ZOOM though, so please check our web site now and then, and watch your email in-box.

For Full calendar & details see <https://hwbka.org.uk/event/>

The Apiarist is a quarterly newsletter produced for members of the High Weald Beekeepers' Association.

Publisher: Jo Gore (Chairman)

Contact: Paul Lindström (Editor),
the.hwbka+apiarist@gmail.com

Next issue: July 2022

...continued from page 1

3 different answers – imagine trying to coordinate 5 divisions made up of hundreds of beekeepers... Good luck Pete 😊

So, what about me. From a beekeeping perspective, I am a firm believer in responsible beekeeping and education for everyone. For existing beekeepers, my view is that we should rear and raise homegrown queens and do what we can to provide as much forage for all pollinating insects as possible. As mentioned above, within the Association we are planning to run some queen rearing sessions to teach members how easy this can be (see article on page 3). There is also some fantastic work going on by members in this area that I read about on the WhatsApp group. Locally adapted, calm queens from good stock can only help to

improve the bees we all keep.

For beginners and the public, I also believe it is important to convey the message that beekeeping isn't the panacea for climate change that many believe. Honey bees alone will not save the planet. We need biodiversity, and it is within our gift to do something about this. Within Britain, there are around 400,000 hectares of private gardens, and together they occupy much more land than all the official nature reserves combined. As well as the opportunity to create vital habitats, our gardens also provide green corridors for wildlife to travel through. All we need to do is ensure we provide plenty of food and shelter, so if this article inspires you to do nothing else, please let it inspire you to plant some native flowers on your patch for the benefit of all pollinating insects.

During my 3-year stint as Chair, I'd

like to be able to improve the education and knowledge sharing opportunities we offer for all members. But to do this, we all need to get involved and offer whatever help and support we can. And I know the committee doesn't have the monopoly on good ideas, so if there is anything you would like to do or see, or any help you would like to offer, then please do let me know.

Well, I think I have said enough for my first article, but sticking with the theme of asking you for help: I have to do another one of these in a couple of months, so if there is anything you would like to know about our committee meetings, or the SBKA, or if there is anything at all that you want me to write about, then please do let me know (email the.hwbka+chair@gmail.com).

Thanks for reading, and see you next time! 🐝

Book reviews

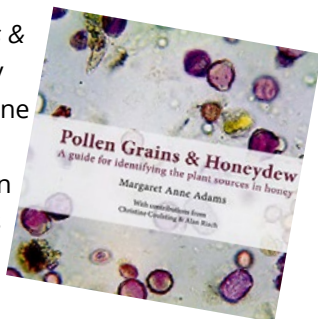
By Paul Lindström

Pollen Grains & Honeydew by Margaret Anne Adams.

The reason I bought this book was because

I read an article in the February issue this year of the BBKA News magazine about pollen microscopy. The book referenced in that article will be reviewed briefly later, but I felt I needed a newer book if possible. The book came out last year, in 2021. It's clearly "a labour of love" as Ann Chilcott described it in her review on her blog "The Beelister" (that's where I saw the book first). Lots of pictures of flowers and pollen as seen in a microscope.

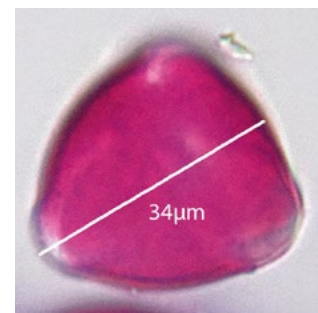
Marc Means, another member of the HWBKA, also read that article, and we decided to have a go at pollen microscopy. We both ordered the book suggested in the article,



Pollen Identification for Beekeepers by Rex Sawyer, and while good in many ways, it's a bit outdated. Some of the material suggested in that book was no longer available to the public (for example Ether – you can't buy that as a private person anymore). But the methods and material Margaret Anne Adams suggests are fully up to date with today's practices.

It's fascinating to look at pollen in a good microscope. I was fortunate in the sense that I already had two microscopes that I have used in my work as a technical journalist within print and publishing, analysing for example the printed result from new types of printers and printing presses. Those have gathered dust of late since I am semi-retired.

I think both Marc and I agree that it's trickier than expected to identify what kind of flower the pollen you look at is if you just scrape out some pollen from the hive. But by collecting pollen from flowers in and around your garden (if this is where you have your apiary) you can build a library, or database, of what different



Pollen from a Cherry tree, March 2022
Photo Paul Lindström

types of pollen look like. Margaret Anne Adams describes how to start with pollen microscopy, and how you can identify pollen both from pollen samples and from the actual honey. Because yes – there are traces of pollen in the honey. This is possibly a reason that my tendency to have "hay fever" in the Spring has been reduced, because I eat our own honey with small amounts of pollen in it. Possibly – but it's a theory I like to pursue. I can strongly recommend to try pollen microscopy, and if you do so – get this book. And the CD that goes with the book by Rex Sawyer. It has the images organised in an Excel spreadsheet – very clever. 🐝

The Calm Queen Project – introduction

By Malcolm Wilkie

In 2021 for the first time in the history of our association queens were reared and offered to members of the Association for free.

These queens came from a particularly docile and calm colony that had belonged to Peter Coxon. The colony was extremely prolific and biddable and the temperament was exceptional.

Every beekeeper raises queens although this is not always in a deliberate and thought out way. The Calm Queen Project was and is an attempt to breed from the very best in the Association and enable members to improve the quality of their bees. Doing this is not without some difficulty. Firstly there is the time and effort needed to prepare the colony from which those Queens will be coming. Two 14X12 brood boxes, extra feeding of both syrup and pollen, the addition of grafting bars and then the continual digging out of queen cells placed by the bees among their own brood and not on the grafting bars. The colony needs to be a calm one as they become extremely large and their natural instincts are being frustrated time and time again. Congratulations to Helen Hadley and Steve Davies for having achieved this.

In 2021 queen cells were offered to all and sundry as long as they were members of the Association. I certainly saw people turn up that I had never met before. That is great and I'm pleased that we are doing something for you that you want to be part of. Part of the condition of having a queen cell was to turn up on the specified dates with a mini mating hive filled with young bees. A queen cell was then harvested and added to the mating hive.

I myself took two queen cells. I brought with me one apidea mating hive and one cheap ersatz copy of an

apidea. I had loaded these up with 300 ml of bees from my own hives. I can report back to you that Lesley and I now have two fantastic colonies headed by Peter Coxon Queens. They are calm, they are prolific and they are extremely healthy. Thank you Helen, thank you Steve and thank you Peter.

It has been difficult, however, to ascertain what success other people had. I suspect many were unsure of how to load up the mini mating hive with the correct number of bees. That is something we want to address this year and to show people what they should be doing. It is crucial that there are enough bees to encourage a new virgin out on a mating flight but not so many that the bees decide that the mating hive is too small and they therefore abscond. It takes about three weeks for a new queen to get mated and start to lay and possibly a further week to ascertain that you don't have a drone layer. Once you have a mated queen, you need to act fairly quickly as they will soon begin to feel very cramped in the mini mating hive.

This is the next hurdle that any beekeeper needs to get over. How best to introduce a newly mated Queen into a colony. Success for me is almost always guaranteed by making up a nucleus with two frames of bees and a frame of stores and introducing my precious Queen into that nucleus by using a press in cage. I always make sure I shake in extra young bees and I always make sure that the nucleus stays in the same apiary as the hive from which I harvested the bees and the brood. This is also something that we wish to show you. After all there is nothing more depressing than having managed to get a fantastic new queen, to know that she is mated and then to have her killed by your own bees!




Marked and numbered queen.

Image courtesy of The Animal and Plant Health Agency (APHA), Crown Copyright

Believe it or not there has been a queen rearing subcommittee of the High Weald Beekeeping Association. The august members of this Committee are myself, Helen Hadley, Peter Coxon, Steve Davies, Rob Gore and John Miller. It has been decided that for everyone's benefit we are going to do two rounds of Queen rearing in 2022.

The first round will be in Spring (May) and we intend to allow members to come and watch us load apideas, harvest queen cells and then eventually introduce mated queens into nuclei.

There will then be a second round of queen rearing in July. This will be so as to raise 10 nucs for the 2022 beginners course. We would like more members to be involved in this. To witness the cell punch method, the addition of these cells to the grafting bar, the use of the Cloake board and then the process of apideas, mating, queen introduction etc. We thought that a WhatsApp group specifically for those interested would be a good thing. Some decisions have to be made at the last moment and a WhatsApp group would enable anyone of us to communicate with those interested and organise something immediately if that was necessary. The idea is for us all to have some fun and to improve our knowledge, for us to get better bees and hopefully to enjoy our beekeeping more.

Please contact Peter Halford (the_hwbka+membership@gmail.com) in order to be signed up to this group. Just being involved will improve the level of your Beekeeping. 

The Calm Queen Project – how it's done

By Helen Hadley

1. The strongest colony with the best brood pattern and the calmest bees was chosen. We basically did the Ben Harden method of queen rearing ([see article here](#)). Bees are much nicer to handle with a queen right hive and the association still wanted to produce honey.

2. You basically need dummy boards and you want the bees to draw out 4 or 5 extra frames of foundation. Heat from the bottom rises making it easier for the bees to draw wax. These new frames of foundation will go in the bottom box to replace frames you pull out to go in the top box for queen rearing.

3. In late April when the bees themselves were starting to draw queen cells, a grafting bar was put into the top brood box. This cell bar needs to be conditioned – for a few days bees walk over the cell bar and leave foot print pheromones. The result is better cell punch acceptance. Frames were rearranged in the top brood box so that there was a frame of food next to the grafting bar and a frame of pollen. At this stage all queen cells were cut out in both the bottom and the top boxes.

4. A day later the Queen was found and put in a queen clip. Brood frames of emerging brood and open brood were removed to the top brood box to encourage the maximum number of nurse bees to migrate upstairs.

Then before reintroducing the Queen the queen cells and emergency Queen cells were removed. The Queen was then put back into the bottom box. The cloake board was then added on the Queen excluder setting. This means that although the cloake board was in place the slide

used to separate the two boxes was not moved across so that the two boxes could still communicate and all young bees could move upstairs unhindered.

The next day the slide of the cloake board was slid across thereby isolating the top and bottom boxes (the top box then realises it is Queenless). Furthermore to get the maximum number of bees into top box the bottom broodbox was rotated 180° so that the entrance faced in the opposite direction. This guarantees that all flying bees walk up searching for a way back in and end up joining the top queenless box.

The colony was left for two hours so that they realised they were queenless in the top box.



This is the slightly tricky part. The cell is pushed out of the cell punch tool and placed in a plastic cup. It is then fixed in place by adding some molten wax.

Once the top box realised that it was hopelessly queenless we were then able to begin the cell punch.

So a frame with new comb containing young larvae was removed from the bottom box and cells were punched out from this frame and attached to plastic Queen cupholders. These cells were glued in place by using molten beeswax (see photos below). This grafting bar was then placed into the top box and the frame of young larvae returned to the bottom box.

6. The bees in the top brood box were now queenless (due to the solid slide of the Cloake board) and so they started drawing out the cells on the grafting bar they had been offered.

7. Two days later cells were checked to see what the success rate had been



Cell punch tool (similar to an apple corer). The tool is warmed up in a thermos of hot water before the chosen cell is removed from the comb. The larvae should be as young as possible.

and to remove any sealed queen cells. Be careful not to bump the boxes about.

If you have a sealed queen cell after two days, then you have evidently chosen a larva (when you were doing your cell punch) that is too old, and she won't make such a good Queen because she won't have been fed royal jelly for long enough.

8. Email sent to members to offer queen cells to be collected.

If you want to know more, come along to the Queen rearing workshop and have a go. It is important to know what you're doing with your mini mating hive as that makes the difference between getting a mated Queen and not getting a mated Queen.

Also it is fundamental that you set about introducing any new mated Queen in the correct way to a nucleus otherwise you're just throwing away all that effort that you have gone to!

Short videos how it's done:

[Video 1](#) – Introduction

[Video 2](#) – Securing queen cells

[Video 3](#) – Checking frames

[Video 4](#) – Successful queen rearing



When the cell punch bar (the grafting bar) is added to the top box (notice the nice new wood of the cell punch bar) neopoll was added so the young bees have no shortage of food.



A headband magnifier is handy when doing the cell punch.

DIY – Wasp Guards

By Steve Davies

If 2022 turns out to be a wasp year there are various methods we can use to help our bees defend themselves and I hope that one of these will benefit your own colonies.

1) The Basic

- Using corrugated pvc sheeting, cut out one ridge 200mm long.
- From the centre of the ridge, drill a series of 2.5mm holes for approximately 50mm. Three parallel lines is recommended.



To use, simply pin the top edge to the hive covering the entrance then block one end completely.



Next, reduce the other opening to one bees width. I have used pieces of foam entrance block but any suitable material will do.



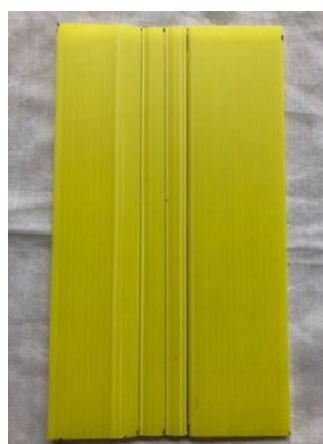
Tape and pin around the edges and that's it! Of all the examples, this is the only one I have used and can confirm it works, even if it doesn't look pretty. It works better without the landing board and wasps tend to be drawn to the centre holes where the scent is. If they continue to be a problem, consider covering it all in black tape (apart from the scent holes) to make it darker; alternatively, you could make a longer version.

Thanks goes to the unknown author who sent this design to BeeCraft several years ago.

2) Still basic but more challenging – both for the beekeeper and for the wasps!

For this you will need some Correx sheeting (or similar).

- Cut out a piece 250 mm x 140 mm.
- 60 mm down from the long edge, make a fold across the complete length.
- Repeat this twice more with 15 mm between each fold.
- Mark another fold 150mm down but fold it in the opposite direction.
- To assemble, fold each section at right angles to form a 'tube'.



- Unfold, then at the bottom of the 140mm section, and in the middle, cut out an opening 180 mm wide and 15 mm high. This will be the hive entrance.
- Two folds below that entrance, drill a series of holes using a 2.5 mm drill bit. This will allow the hive scent to drift out.



- Once complete, fold over once more and tape the sides together.



With the hive entrance block left in situ (smallest opening), tape the wasp guard in place making sure the openings align. Note – you will also need to pin the tape down to prevent the rain and Correx pulling it away.



The bees are able to exit left and right but if the wasp problem is severe, block one exit completely leaving just one for them to defend. If you use landing boards, consider taking them off to make it harder for the wasps to gain entry.

The measurements given are the minimum required; it can be made to any size you like, even to the full width of the hive.

Any Correx left over can become a porch roof. Cut a piece 100 mm deep and the width of the brood box. Then pin in place as shown below:



Not as elegant as a WBC but it does the job, especially in prolonged heavy rain (thanks to Peter Cammack).

3) The Advanced

This is my version of the Wasp Out sold by EH Thorne (£6.99). One reason I like this is the ease with which it can be fitted. Simply remove the existing entrance block and replace with the Wasp Out.

Materials:

First, you will need either an existing entrance block or make one yourself using 22 mm x 22 mm stripwood. I prefer the latter as I can make the hive entrance as small as I need.

You will also need some electrical mini trunking 25 mm x 16 mm. A two metre length costs £1.85 (Screwfix) and this will give you eight pieces. Finally, you will need four 10 mm screws.

Construction:

- Either make your own entrance block or square off the edges of a bought one (make sure you use the smallest entrance).
- Cut a 250mm length of trunking. (see image next page)



- Separate the two parts of the trunking. Starting from the middle, drill three rows of holes in the lid using a 2.5mm drill bit. They should be approximately 5mm apart and extend for 50mm (25mm either side of centre).
- On the remaining section of trunking, and directly opposite the holes, cut out the entrance. This can be either at the bottom edge or in the middle; the full length of the entrance block opening or made smaller. The exact size will depend on your preferences. I have made mine with a bottom cut mainly because I use landing boards.



To assemble, drill four screw holes in the trunking entrance block approximately 20mm from either end and 20mm from the edges of the entrance.



Next, align the bottom of the trunking with the bottom of the entrance block (making sure both entrances align). Then drill and screw the units together making sure the screw heads are not proud of the trunking. Clip the lid in place and it's ready to go; simply remove the entrance block and replace with this.



Again, if the wasp situation is really bad, one exit can be blocked off.

If you intend to keep this on for a prolonged length of time (over winter) you may need to consider adapting it to fit a mouseguard. The genuine Wasp Out uses doweling which prevents mice from entering but still allows free passage of the bees. Simply remove the two outer screws, re-drill the holes and fit an appropriate sized dowel. Refit the lid and you're done.

Although all of these help deter wasps, some still manage to get in. They do seem reluctant to enter and frequently reappear within a short time with a guard bee close behind 😊🐝

A word of warning - if this is to be left in place for a prolonged time, it needs to be checked regularly as it can become blocked by dead bees. Slide the cover to one side and clean out the debris without causing too much disturbance to the bees.



Photo Paul Lindström

Part 10 in a multipart series called "Three Bees"

Winter is come

By Laurel Lindström

The sisters were waiting. And Curly was keeping his head as still as he could, standing as straight as he could, eyes fixed and antennae up and listening. He tried not to tremble and tried to imagine he was his brother Burly, lost somewhere in summer's haze. A single whisper was passing around the colony as the bees drew in closer. They were waiting, waiting and alert keen to hear Curly's plan for their survival.

With Burly in his mind's eye, Curly stood up even straighter, moved his head from one side to the other and started to outline his plan. He began with a grateful acknowledgement of the privilege he had been given, honour, blah blah until he became aware of a cacaphony of blah blah blahing. He stopped ostensibly to clear his throat. "Just get to the point would you?" and his friendly messenger bee raised her head as her six sisters nodded in agreement and mutterings about drones wittering on, better off without them, better off alone, are we sure we want to do this? This last an alarming suggestion that brought Curly straight to his plan.

"Right. Our objective is survival. We must keep Mother and the nest warm, but not as warm as summer as there isn't so much brood to care for. We need the nest ready for when Mother feels it's right to start laying again. I can't tell you when that is, but she will know. All I can tell you is that we must be ready." This last Curly

said with some urgency, as it had only just occurred to him that indeed if the darkness and cold continue to grow, the colony will soon be dangerously low on everything: food, water, brood and bees. Any mistake will mean the end. He noted with some satisfaction that all around the bees were watching and murmuring agreement with his explanation of the objective. Recognition and agreement of the objective was the first step.

"The plan I have devised is one you can follow every time the dark and cold come. We know from Mother that this thing called winter comes every year and that every year it is different, but eventually spring comes and the sun starts shining once again and we can stay warm. Now it's getting colder so we need to cluster around the nest so that Mother survives and will start laying again in the spring. We'll only have a few days between her laying and the birth of new bees who can help nurse the eggs and grubs as they come along. They'll also help us with the warmth, but in the meantime we need to cluster." "We know that you fool of a drone" came an angry voice from somewhere out on the edge of the cluster. "We know that, yes," Curly hesitated and tweetled his antennae anxiously before adding "but it doesn't always work does it? We don't always survive the night and we know that we lose sisters when it gets really cold and the grey

light turns black quicker and lasts longer. We know this." A general bee-harumphing rippled through the assembled bees and a small voice, that of a bee only recently born could be heard to whisper "I don't want to die before I've lived".

Curly's plan was bouncing around his head and he was struggling to control the conversation. Too fast and they wouldn't believe him, too slow and they would think he was making it up as he went along. He remembered Burly and his habit of stroking his antennae and mandibles, and followed the model as best he could, while the hubbub lessened and the young sister was comforted by some of her siblings. Curly heard with some concern, "at least you're not a drone, at least you know we'll take care of you". Judging the time was right Curly started to outline his plan. He knew he had to be completely clear, leave no possibility of misunderstanding or doubt, and to make sure that there was just enough concern about the plan to ensure that the Seven Sisters would not trust themselves to pull it off without Curly.

"We cluster like we always do, but we don't just clump up around the nest. We do follow the principles of clumping, keeping Mother and the brood safe and warm in the middle." "What's he talking about? Swarming? We only swarm when the weather's hot and the hive is too full and when Mother gets the hint that it's time for



Image courtesy of The Animal and Plant Health Agency (APHA), Crown Copyright

new blood?" Curly did his best to nod in wise agreement, slow and careful and continued with his plan. "We use scouts to check how cold people are getting on the outside of the clump, they can crawl into the centre and as they go tell the sisters to prepare to move back from where they are, and out towards the periphery. The scouts will need to move slowly to conserve energy, but their movement will generate heat. It might balance out." At this point 30,000 bee brains were whirring at the idea that they would rotate in layers from the centre of the nest out to the external layers of clustered bees. It was a lot to take in, but Curly had his senses closely tuned to those of the Seven Sisters who were not communicating. He took this as a good sign, a sign that each of the seven was thinking hard and that none had made any judgement about his plan, at least not yet.

"With every rotation we minimise the loss of bees on the outside to the cold. You all know what happens to us when the temperature drops to 9°. We stop moving and we gradually atrophy and die. We drop to the floor and wait to die. I know because I've seen it, I know because it's what happens if a bee isn't lucky enough

that the sun comes to warm her up again before she has to die."

Curly then explained how he had survived following the drone massacre some weeks earlier. He explained how he had hidden during the day in a tiny space pulled together from disused and empty comb. He explained how he had been lucky that the small corner of the hive where he had been lodged happened to be the part of the hive where the sun hit first, so the cold did not last as long. He told them how he moved about the hive at night, only sipping uncapped honey and only where there were sleeping bees. And this is how he found out about them dying in the cold. "I saw with my own eyes how once chilled a bee has no chance of survival without help." Survival, he explained can only happen if the colony follows the plan.

Curly could sense that the Seven Sisters were communicating, not visibly or with much intensity but there was something going on and he could see the old drone patrol getting into position. He noted there were some new members in the group, replacing those who had died off since their prevention convention. Curly pulled himself up to be as tall as he could manage, and did his

best to adopt an air of nonchalant authority. If he had had fingernails he would have been studying them as he waited for some response. None being forthcoming he asked in as casual a tone as he could muster, "any questions? Or are you all happy with the plan? It means you can live longer than usual in the cold and dark, and it means Mother and the babies will survive too." At this Curly noticed the Seven Sisters and drone patrol rearranging themselves one on either side of him, to form a sort of channel or corridor. Curly soon realised that this was in fact an aisle and that Mother, her retinue in train, was slowly coming towards him. He looked anxiously from side to side and the drone patrol standing to attention and at the Seven Sisters as they bowed in reverence to the Queen. Their reverence was more for the benefit of the colony than in deference to her Majesty and as a one they were sighing with some annoyance at this unprecedented overstep of the usual boundaries. What was she doing interfering in the business of the colony? The Queen's only function is to mate and lay eggs and her involvement in big decisions is nil. Curly bowed as low as he could manage without tipping over and said "Your Majesty" in a grovelling tone as he did so. He could see the Seven Sisters antennae working furiously and understood that this was not so bad.

"Your Majesty has arrived just in time to hear our decision and the plan of this remnant drone to help us survive the winter." The Queen looked up absent mindedly. Her intention had never been to get involved with whatever it was that was going on, here so close to the middle of her nest. She was confused and leant her head on one side with a view to taking a nap instead. One of her retinue tidied the drooping antennae and positioned the Queen close to some empty honeycomb cells so that she could doze more

