



The Apiarist

... High Weald Beekeepers' Newsletter

Chairman's Chatter

Well, another beekeeping year is drawing to a close and all those jobs that need to be done to get the girls through another winter are just about done ... hopefully! It always brings about mixed feelings for me. I'll miss spending time communing with them and going through the hives ... but on the other hand it is a very welcome break too.

I don't know how the beekeeping year has been for you? For me it has been mixed. Weather wise, certainly not good for the bees - a warm February then long cold dry spells and long cold wet spells. The poor creatures didn't know whether they were coming or going. It's been a disaster for Blue Tits too apparently

according to Chris Packham. Some of my colonies prospered despite this, and others didn't do so well. I still made increase even though I promised myself I'd cut down, and I sold some colonies too. The main casualty has been my honey crop which was less than half the usual yield. This is somewhat of a mixed blessing as extracting honey, jarring and labelling is not my favourite beekeeping activity. However, my health food shop customers would have wished it otherwise judging by the number of pleading telephone calls I get.

Talking of things drawing to a close, this is my last year as

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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/>



Peter Coxon has volunteered to be the Manager of the Horsted Green Park apiary, and the Beginners' Course session on honey extraction took place here.

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Chairman ... is that the sound of cheering I can hear? Despite my initial reluctance and resistance to Helen's cajoling I have really enjoyed the role and being able to make a small contribution to the High Weald Beekeepers' Association. It is a great group of beekeeping folk. I won't be disappearing though as I'll be looking after our new apiary at Little Horsted. Despite a few failed splits earlier this year that apiary is going into winter with 4 very strong colonies, three of which have queens that are daughters of the colony we used for a most successful queen rearing this year and we plan to do more queen rearing next year ... so watch this space.

This last year or so has been challenging, as most of the activities that help glue the association together had to be suspended or held by Zoom. Thank goodness for Zoom ... although those who have had to work through the pandemic using Zoom might not share that sentiment. Wish I'd bought shares in them though!

Despite the pandemic, this year we have managed to run a fairly normal

in-person course and Taster Day too, the former actually augmented by a post-session catchup and quiz on Zoom. The shows and fetes we would normally attend have been off the menu though. Then just as Talha re-started some of our other 'normal' in-person activities such as Bee Banter we have been hit by this fuel shortage debacle. The Barbeque became a lunch and only 8 folks made it. At the last Bee Banter there was one person in attendance I believe ...Keith... feeling smug no doubt in his electric car. Hopefully our next main event, our own AGM and Honey Show will not fall foul of some other catastrophe like a national shortage of electricity or some such. It is currently scheduled for Sunday the 28th November and will be held at Five Ashes Village hall as in previous years ... apart from 2020 when it was held on Zoom ... a novel experience and better than nothing but not as good as the real thing.

I do hope you will come along and enter some of your own honey or other bee-related enterprises. Perhaps even volunteer to join our committee to help spread the load?

Peter Coxon



The Beginners' Course this year has luckily been completed through a mix of ZOOM-meetings, live sessions and one-to-one sessions with the mentors. Here Steve Davies and Rob Gore demonstrate different types of clearer boards at the honey extraction session in July at the Horsted Green Park apiary.

Book review

By Julia Parrish

Liquid Gold (or Bees and the Pursuit of Midlife Honey) by Roger Morgan Grenville.

From an early encounter as a child with a beekeeper, the author harboured an interest in bees.

A failed attempt to catch and hive a swarm begins his adult relationship with bees, but a chance meeting with an enthusiastic neighbour entices him to start an apiary together as bee buddies.

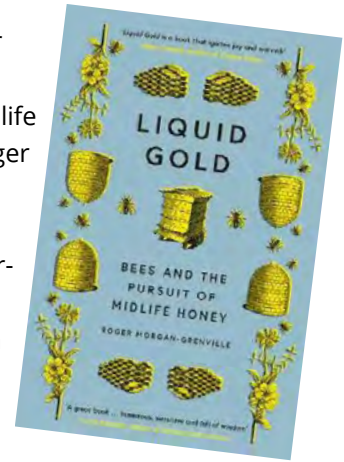
Liquid Gold is a joy, as Roger Morgan Grenville regales the reader with tales of their bungled adventures, as they naively attempt to manage their new pastime with little to no knowledge.

Much beer is drunk as they discuss their strategies, not least the budget! The goal of £250 spend in the first year and break even in the 2nd, becomes more and more farcical as they cover their mistakes with more expenditure, and indulge their new passion at bee auctions.

As their first year proceeds, the tale is interwoven with many well researched facts about bees, many tales told with self deprecating humour, but also with a growing friendship between the two men as they sit on the log by the hives with their beers contemplating nature and its impact on them.

There is also a realisation that managing the bees has become a metaphor for a changed reaction to the cross roads that middle age can present, and brings a fresh meaning to life.

An uplifting and amusing read about the beginner Beekeeper.



How did you come to be a beekeeper?

Meet Helen Hadley – the “The Honey Queen” of HWBKA according to Malcolm Wilkie, and our previous chair.

Question: Why and when did you get into beekeeping?

Answer: I think my love for nature, gardens and wildlife is in my DNA. My grandparents were good gardeners and loved wildlife and my parents were very keen on butterfly conservation and the Woodland Trust. I am a keen gardener and joined the international clematis society. I have met some amazing people and one of the members organised a trip to Germany (I think it was in 2006). While in Germany we visited a member's garden, Helga Rick, and at the bottom of her award winning beautiful garden were some lovely Langstroth beehives. I bought some of her honey and decided I would find out about how to keep honey bees. I think it was 2008 I joined High Weald (I was on the same beginners' course as Malcolm).

Q: What type (types) of bee hive do you prefer?

A: I use 14x12 wooden hives, mainly cedar. I wish I had bought Smith hives and used just one size of box, brood size boxes (no supers boxes). However as I get older, lifting all the supers is getting harder. I am looking at buying a Hyde 14x12 long hive. www.hydehives.co.uk.

Q: Have you tried other types of hive design? If so, any comments on why you didn't continue with this (those)?

A: I have tried Payne's poly hive, but I find the inside gets damp and mouldy over winter. I do like poly nuc boxes, Maisemore do a good design and BS honey also have a great poly nuc.

Q: What's your best memory of bee keeping?

A: Funniest memory: I had bought some Buckfast queens via post. I was a new beekeeper and Malcolm had offered his help, we sat in my car releasing the worker bees before introducing a new queen to a queenless hive. The Queen escaped and we were desperately trying to find her, she flew all over the inside of my car. Never

to be repeated, and it's not necessary to remove worker bees before introducing a queen. Postal queens are more difficult to introduce as they are out of laying condition and need a slow release method of introduction, ideally into a nuc of young bees and emerging brood, as they are less likely to kill her. I have not bought queens for some years now.

Q: What's your worst memory/incident in beekeeping?

A: Finding EFB (European foulbrood) with bee inspector and killing loads of large colonies, a miserable business and one I hope never to repeat. It took me 3 years to finally get the all clear. I would recommend shook swarming the whole apiary if you find EFB, not just the affected colonies. Good brood pattern is key – if you don't have a good brood pattern something is wrong with your bees. Seek help from a more experienced beekeeper if you are at all concerned about your bees brood pattern.

Q: Any particular mentor or beekeeper expert you are especially grateful to?

A: Johannes Blummel. He is a natural beekeeper, who I was lucky enough to work with and had his bees on site. He allowed his bees to swarm but would then collect his swarms. I don't think he used queen excluders, he called them honey excluders. He was a gentle beekeeper and he makes the most amazing beeswax church candles. Sadly he has moved abroad but was a HWBKA member.

Q: If you were to give one single piece of advice to a prospective beekeeper, what would it be?

A: Don't buy any equipment or bees, just find a bee mentor that you can work with for a year. Then you can make informed decisions on the best bee equipment for your needs.

Q: How much honey do you get in a year and how is it possible to get so much honey from the number of colonies that you have got?



Helen Hadley joined HWBKA in 2008. The picture show some of her hives as well as some of her beloved clematis.

A: In a good year I can get 80-100 lbs per colony. But it's important to keep young queens, new queens every year. Use Buckfast bees if you want a high yield of honey, as most of the commercial beekeepers do.

You need to be ruthless, remove failing queens. I find it hard to squash queens though. An acre of mature trees produce loads of nectar, far more than an acre of crops. So if you find an apiary near loads of mature trees and the weather is on your side, you get a tonne of honey.


There are also management techniques. Knowing your main nectar flow is important. Manage your bees to get a huge foraging flying force, so they gather all the available nectar. This is very difficult as weather is a major factor. Split your hives at the correct time, so that your huge work force don't just eat all the nectar. It's way more difficult than anymore ever tells you.

Oh, also – imperative you have varroa as low as possible. Healthy strong colonies with young quality well mated queens + forage + good weather = honey.

Q: Anything else you would like to add?

A: We all keep honey bees for different reasons. I find beekeeping very therapeutic, it calms my soul. Dead bees don't make honey, so you need to look after your bees, feed them if they need it. Select and keep your best bees.

A good apiary site is not that easy to find, but when you find a good apiary site it's amazing for your bees and you will have happy, healthy and productive bees.

Happy beekeeping. 

European Foul Brood

By Jonathan Coote

Having kept bees for over forty years and come across EFB in other beekeeper's bees but never in my own, I thought I should share my experiences with you when I encountered European Foul Brood among my own bees earlier this year.

My colonies had suffered somewhat over the winter period as did many others from the very unusual weather patterns mentioned in my earlier article (The Apiarist July 2021) when many rural beekeepers lost up to half their colonies.

One surprise survivor of mine was a small feral colony I had recovered late last autumn. It had taken up residence in a long abandoned hive belonging to an elderly beekeeper. He had given up beekeeping some years ago following a serious illness. His apiary had become completely overgrown and the colony was only discovered when steps were taken to clear the area of scrub which had once been his apiary (and pride and joy). There had been 12 WBC hives. All of these were now collapsed and rotten but somehow a swarm had found and occupied the remains of one hive which was less decrepit and possibly in desperation the swarm had set up home there, probably during the previous summer. It

had rebuilt combs mainly in what was left of the old frames and had stored enough honey for the winter. There were probably about 8-10,000 workers and a very yellow coloured queen, possibly Italian, but, by then, brood was no longer present.

On hearing news of this little colony the now very elderly owner was anxious that it should be saved.

Having found no obvious signs of disease, I agreed to remove and rehouse the colony into a clean weatherproof hive but being late in the season replacing the very irregular comb and stores with fresh was simply impractical. There seemed to be adequate stores of honey to last them through to the spring.

In late February I had to move my other colonies of bees home because the out apiary site they were on was needed by the owners, a charitable trust. They had unexpectedly received funding for a major re-landscaping project and my apiary there was right in the way of the proposed project works. Meanwhile the rescued colony, now alongside them, had survived the winter.

All is not well

In April as the colonies were beginning to expand the weather was cold



Jonathan Coote

and windy for several weeks.

At this time each colony was well provisioned but some of their brood, particularly of the rescued colony, was showing signs similar to 'chilled brood'. The larvae, particularly the larger ones, were showing unusual symptoms.

Instead of being the normal pearlescent white colour, each on a good pool of brood food and with well-defined segmental rings, some seemed rather dull, slightly discoloured and brownish looking. It was also apparent that the bees were opening the cappings on several recently sealed pupae.

Alarm bells were ringing as this was not at all like remote areas of brood suffering from lack of warmth and starvation, the symptoms of 'chill brood', but much more worryingly it was more like the symptoms of EFB – European foulbrood. Advanced larvae were looking rather distended with yellow aspects which were due to distended guts. Others had ceased growing, had become lacking in segmentation and a white waxy appearance. These were fairly definitely symptoms of EFB

EFB is a serious bacterial infection of the larval digestive tract of honey bees. The bacteria, as they multiply, compete with the larvae for the food fed to the larvae by the workers. The larvae quite rapidly begin to die from competition for food and starvation. The larval skin swells and stretches as the mass of bacteria increases.

Unfortunately when the workers try to clear away infected larvae they



Advanced stage of EFB. Image courtesy of BeeBase © Crown copyright

spread the bacteria around to other larvae. With larval losses and fewer workers emerging the bacteria gain the upper hand in the competition for food. As the colony fails bees from other colonies commence robbing unused food stores and thus spread the infection to their own young larvae in colonies elsewhere. By stopping this infection as early as possible the risk of a local epidemic is greatly reduced.

Call the Inspector

With this in mind if anything about the brood is untoward, it is vital to contact the regional (RBI) or seasonal Bee Inspector (SBI) for your area. Both are employed by the National Bee Unit. Contact details are on [Beebase](#).

The Bee Inspector will visit without delay and carry out a bacterial 'flow test' on larvae or their remains.

In my case the test was positive. By luck I had retained a piece of the original brood comb from the rescued colony. This contained a small fragment of barely visible dead larval remains which tested positive as did other more recent samples so the source of infection was clear. Unfortunately it had come with the rescued colony.

Reporting the possibility of this

disease, and also of American Foul Brood (AFB), is a legal obligation on all beekeepers under the Bee Diseases Order. This opens the door to practical help in limiting the spread of the two specified bee diseases. There is no charge for the disease control service whether a positive or negative result.

The RBI/SBI will attend and carry out a Flow Test if there is evidence giving reasonable cause for concern. The 'flow test' involves crushing a small sample of apparently abnormal larvae in a special fluid. A drop of this will, when placed in the 'lateral flow device', show visual coloured lines to indicate the specific presence of *Melissococcus plutonius*, the EFB bacteria.

"Shook swarming" might work

If the colony is otherwise strong and healthy and you are fortunate to spot the problem very early and have it identified very promptly you may be lucky. When only a very few larvae are infected, and if a colony is strong and it is early in the season, treatment by the inspector consists of carefully shaking the adult bees onto new frames of fresh foundation placed in a newly sterilised hive. This might sometimes be an option.

'Shook swarming' can often be successful in separating healthy bees from the infected larvae, all of which will potentially be carriers able to spread the infection. However the brood and all of the frames will have to be destroyed and the hive itself thoroughly disinfected.

Next step: destruction

'Shook swarming' is not always successful. The Inspector will decide if shook swarming is appropriate. If not, all of the infected bees and brood and those in close proximity will be destroyed. The infected elements of the hive, namely combs, brood, honey and bees will be burnt under the Inspector's supervision.

Hive components i.e. boxes, roofs, floors etc. will be sterilised.

This work will be done as soon as possible.

If destruction is required by the Inspector, the first, and probably the toughest and most upsetting task for the bee keeper, probably working alone, will be shutting the bees into their hives at dusk on the evening before the Inspector's cleansing visit, when all the bees have returned to their hives.

The hive entrances must then be securely blocked, usually using close fitting strips of foam plastic (not mesh). Once this is done, pre-measured containers each with 150ml (about a third of a pint) of petrol per hive) are quickly poured into each hive through the hole in the crown board and closed up using a piece of flat tile or plywood to prevent the bees from emerging. This is easier if help is available.

On NO account should a smoker be used or be anywhere nearby.

Provided the bees are properly contained, the rapid addition of the petrol will cause the bees to panic and to rapidly beat their wings in an effort to expel the fumes, but this generates heat which will vaporise the petrol and spread the fumes very rapidly. These fumes suffocate the



"Shook swarming" can sometimes be a remedy. Here this is prepared. Image courtesy of BeeBase © Crown copyright

bees and all the brood in just a minute or two. The sound of the colony's distress is extremely upsetting, but it is without doubt the most humane way of dealing with the issue. The hive is then left sealed up.

The Inspector will come the following day to oversee the burning of all of the bee debris, frames, wax, honey, comb etc. For this the Bee Inspector will require the provision of a pit about a metre square and 70cm deep close by to contain the burning material and subsequently burying infected residues to prevent robbing of residues by other bees.

While the burning is in progress the Inspector will undertake the detailed sterilisation by gas torching of all hive boxes, roofs, floors, crown boards, and metal queen excluders. If poly hives and plastic excluders are in use, these can usually be carefully cleaned then sterilised by immersing and soaking for 24 hours in a hot, strong solution of washing soda and household bleach. This is done wearing effective PPE in a large suitably chemical/water proof container. Care is needed in the process and in safely disposing of the toxic effluent.

Antibiotics won't help much

In the past antibiotics were widely used to control both EFB and AFB but over time the bacteria showed signs of resistance which might be transferred to other bacterial types. Antibiotics are still used in restricted cases in the UK. Their use in Canada, China and the US where both of these diseases are still quite common is normal but with diminishing effect

The UK, through the work of the National Bee Unit and its inspectors has a good record of containing the spread of both AFB and EFB. The process described here, while emotionally and physically demanding on the beekeeper, is effective.

It can be very hard to cope with this but I believe it is necessary for beekeepers to participate in the pro-

cess, especially taking responsibility for the destruction of our own bees. Had my colonies been a bit stronger I might have opted for a 'shook swarm' comb change.

It was heart-breaking but I felt that destruction was absolutely the right solution as the shook swarm is not always successful and once destruction has been done there is no possibility of a colony becoming an 'Typhoid Mary' ([Mary Mallon](#)) spreading the disease among my neighbouring beekeepers.

I was later delighted, after the all clear, to accept the generous offer of two nukes from a nearby beekeeper who appreciated the removal of the threat to his own bees. This helped me get started again.

If your bees are infected with EFB there is no reason to feel embarrassed or that you have failed to look after them properly. I would encourage anyone in this situation to share their concerns with any beekeepers they know in their area as quickly as they can if they have suspicions. This, along with contacting the Bee Inspector are the best ways of helping to limit the spread of this very contagious disease. It will help the Inspector if you can locate/identify other hives in your area. Quite a number of beekeepers are not on Beebase or members of an association. Any information you can give will make containment easier to achieve.

Finally a few words about American Foul Brood (AFB)

The appearance and progress of AFB in brood is different from EFB and is best compared by looking at the pictures on Beebase

Unlike EFB, AFB is a sporulating (i.e. spore producing) bacterium and importantly, these infective spores are very resistant to destruction and are also long lived. The spores can remain infective for 20 years or more on old stored equipment, old combs, hive products and residues.


AFB is much less prevalent in the UK than EFB. Many UK AFB cases seem to arise from allowing bees access to honey imported from parts of the world where there are higher AFB infection levels. This is often caused by relying on antibiotic controls where they have become less effective through resistance.

Abandoned or insecurely stored empty bulk containers used to import honey from these sources are often implicated. Jars of imported or blended honey placed outside by well-wishers to 'help the bees survive' are also implicated. These are now probably among the main sources of UK AFB outbreaks.

Cases of AFB still occur when someone, often a beginner, unknowingly buys or inherits old but AFB spore infected hives or accessories, possibly from an elderly or deceased relative. Thorough heat treatment of such equipment is essential to avoid any risks so it is probably better to decline such opportunities.

There are many good illustrations, particularly on [BeeBase](#) of the appearance of the various stages of both EFB and AFB infections to guide you and also help you to inspect very carefully any bees with brood you are offered before mixing them with others you might have.

Ideally for both EFB and AFB control, collected swarms should be quarantined and monitored until plenty of new brood is present and new adult bees are emerging. Colonies with either EFB or AFB are unlikely to get strong enough to swarm but strong colonies big enough to swarm, frequently rob weaker ones, making them more likely as a result to have encountered those infected with the bacteria.

Finally, as members of the Association, should you be concerned that your bees might be infected – let the Bee Inspector know straight away. They would rather respond to a false alarm than miss the start of an outbreak. 

A beginner's journey with a Flow Super

By Kerry Nutley

So let's be honest, the mention of the words 'Flow Hive' seem to send shock waves through the traditional bee keeping community. So many social posts cover how this crowd funded initiative has led to a generation of ill-informed beekeepers who don't tend to their bees, remove all the stores not leaving enough for them to over-winter. Let's not mention not educated enough to check for disease or care about colony health.

If I'm honest in some cases these concerns are valid. Signing up to the various flow hive communities online there are a community of well-intended newbie beekeepers who are on a mission to save the bees and have gone online and purchased a Flow Hive, acquired bees and left it there. However like with me, this is not true for all Flow Hive owners.

I think it comes back to the old adage of poor workman and tools. The Flow Hive in itself is a great product, however if beekeepers, whatever hive they buy, do not educate themselves, they will have the same outcome as the concerns mentioned above about Flow. I'm sure there are many uneducated beekeepers out there on normal National Hives and alike, but these are not publicised so widely given the social media buzz around Flow.

I chose a Flow Super as part of a hive system based on research, talking to people in HWBKA, and what is right for me, my circumstance and the location of my hives. So may I ask that before you make a judgement, please don't assume because a beekeeper has a Flow product they are just in it for the honey!

So why did I choose Flow Hive? As a child I have always loved bees – they have always intrigued me. So when I had a suitable space, and the means, which I was very blessed to acquire when I move to Buxted, I decided to commence my beekeeping

journey. I had not heard of the Flow Hive until I spoke to a friend. I read up and researched – the ability not to disturb the bees when harvesting, and less mess (my first experience of beekeeping was harvesting in Biology when I dropped a full frame of honey, so any means to avoid this experience again was very appealing). Not having to book in advance to hire equipment, as well as having a long working week (I could only do beekeeping on weekends, which I was sure would be the busiest time to rent an extractor). And as a new bee keeper – why would I not start off on the new technology?

I read up on the pros and cons and I signed up to the beginner class. I spoke to other Flow owners, for example Edward Hutt, and got their advice. Malcom came and checked the site to discuss different hive types, given I live on a windy hill in a valley. Based on those conversations I went for a very unusual solution, a National 14X12 poly hive with a national Flow Super. This was made possible by a conversation with Talha Dinc at the first (and only) beginner's

session in 2019 where he recommended Abelo hives where you could mix wood and poly. So with a minor adaption of the Abelo lid I was able to have the benefits of a poly hive to provide protection against the wind as recommended by Malcolm, with the larger frames, as recommended in the course, but have my Flow Super. The mix and match approach was suggested by Edward Hutt.

So as per the recommendation of the first session of training, – “buy your hives now and learn with the course” – I found myself in the predicament of being tooled up, having purchased my equipment the night post the first session, and no course due to COVID. Online, You Tube and various books became my best friends and in May I decided to make the plunge and purchased a Buckfast colony from Margret Ginman in the HWBKA community as advertised in one of Peter Halford's news bulletins. So bees in hand I transferred them to my hive and then was very blessed to have the coaching and support of the amazing Peter Coxon, a fellow Buxted beekeeper.



Flow – invented and patented by father and son team Stu and Cedar Anderson.



The Flow Super

The Flow Super – UK National Araucaria – is National in size and contains 8 Flow frames. They are considerably deeper than standard flow supers. There are many articles online that comments that bees don't take to Flow Supers. I melted down a sheet of foundation (not having any spare comb from my colony) and painted the frames with wax to start with. As the bees started creating bridging comb I smeared this on the flow frames to entice – which worked.

The bees do need to work them. Much like building out new foundation, the bees with Flow frames need to seal the cells, and build out before they can insert the honey. As I am sure you know the Flow Supers work on the premise of cracking the super cells in frames to create a staircase for the honey to flow down, so you can harvest via tubes straight into a jar or bucket. Thus removing the need to de-cap the wax, centrifuge, sieve etc as the capping wax remains on the frame, and the honey is harvested behind the wax.

Once harvested the bees come along to remove the wax, reseal and refill. You don't have to remove the bees to harvest and the frames can be withdrawn frame by frame as availability and stores allow.



The bees need to seal the cells of the Flow frames, and build out before they can insert the honey.

With a new Flow Super it can initially take a while for the bees to seal the cells and build out. You often see the bees busy in the super but with no stored honey. As Malcolm always says 'with beekeeping you just need to be patient'. This is definitely the case with new Flow Supers, given the size and extra work of sealing the cells as well as building out the comb. This takes longer than building out

standard super foundation because the Flow frames are larger and deeper.

However I must say the wait is worth it. The real benefit for me is as a working beekeeper, and as a new beekeeper unsure of purchasing all of the harvesting equipment straight away – the ability to harvest in an hour is a godsend.

I harvested twice last year from my flow super taking two frames each time. I could have taken more, but I was adamant to leave stores for my bees over winter and not use fondant, and I'm not that keen on honey, just my bees.

So I adjusted a bucket by cutting out two holes to which food quality plastic pipes from the Flow harvesting tubes could be connect. I cracked two capped frames, went back to work, letting the honey flow out over about half an hour. I then sieved the honey, after testing water content, from the bucket into jars, stuck on my labels – I was done in an hour.

There was no wax or sediment in the honey – it was crystal clear. I did



Kerry's Flow super – called the UK National Araucaria.



A modified settling bucket – two holes cut out and food quality plastic pipes connected to the Flow harvesting tubes.

not have to disturb the bees who through the process just moved to other frames. By adding the extra tubes to connect the bucket to the Flow Harvesting Tube meant I did not

attract wasps or bees in collection. It was so hassle-free it was unbelievable. As Keith my bee buddy knows I come with an inbred klutz gene, so for me this is the correct solution – less mess, less risk, less time spent.

This was my second year with the Flow Supers, and I left them under the brood box with stores over winter. The bees cleared them out nicely. I will find out this year if it did make them brittle. I washed them down on the outer parts of the frames with washing soda solution to clean them up a bit ready for this season, and kept as much of the built out comb as possible to give the bees a head start.

I would strongly recommend Flow to beekeepers who want to become



Success – crystal clear and tasty honey.

educated in beekeeping. I would not recommend any hive type to a beekeeper, Flow or otherwise, if they do not want to learn about bees and care for them correctly. My bee buddy has been amazing in informing, guiding and teaching me – the Flow frame is the least of my problems. Swarming and bee health are instead the main focus point for me. It's a steep learning curve though.



Online blogs:

The Honey Bee Suite blog

by Paul Lindström

There are many blogs about beekeeping, all with different style and emphasis. One blog I came across recently and was very impressed with is the "Honey Bee Suite" produced by Rusty Burlew from Washington, USA. She is a master beekeeper and covers a wide range of topics in her blog. Rusty has studied agriculture, honey bees and the environment for over 30 years. She is passionate about the conservation of native bees and founded the Native Bee Conservancy in Washington state. She is often very witty and funny in the way she writes, even (or especially) if the topic is quite heavy on the scientific side. She has a capacity to explain science in a way so that it sounds quite accessible and not too complicated.

If this tempts you to read Rusty's blog, I suggest you start with the fairly recent blog post headlined "Beekeepers and the [Dunning-Kruger Effect: Unskilled and Unaware](#)". It's a witty but insightful article about the typical learning curve of a beekeeper. The second year beekeeper tends to "know it all", while a beekeeper with

7 year+ experience has realized that there is still so much to learn that, in a way, they know nothing really.

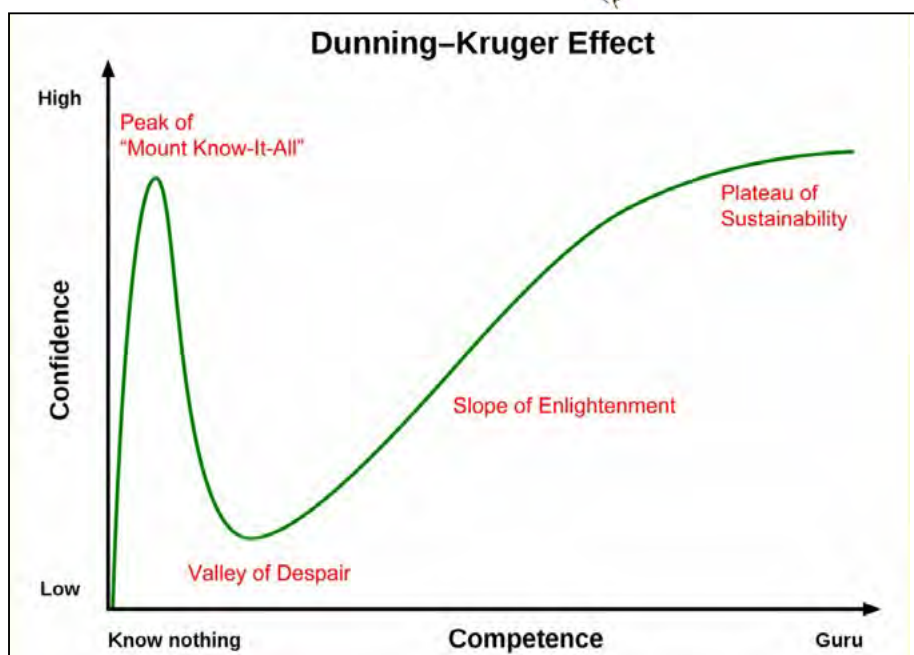
Rusty gives hilarious examples of new beekeepers starting to lecture her on bees, and even a wannabee beekeeper (who planned to get bees, but still hadn't worked a colony hands-on) who lectured her about what she had said in a reply to a



Rusty Burlew

question put to her.

I strongly suggest you read for yourself – she is really good. And her web site contains loads of interesting stuff, that I have just started to explore.



The Dunning-Kruger effect is mentioned in one of Rusty's recent articles.

The tale of Sticky Mess and the Thirty Stings

By Malcolm Wilkie

Grace Walasek is one of the beginners on the 2021 course. As the main trainer I soon picked up that she was making rapid progress (thank you Jo Groom). It became clear to me that she was obsessed with her bees and wanted them to do well.

The beginners course offers access to a WhatsApp group which is monitored by myself and the other tutors. This forms an integral part of their training and participants can quickly see what problems are occurring and how to deal with those problems. It also means that they can get a question answered, sometimes within 10 minutes.

On June 22 a message popped up. Grace had been cutting out Queen cells and having done so she opened them up. A fully developed virgin Queen walked out of one of the cells. What should she do? I messaged back that I was doing swarm control down in Hastings but that I could come up to Crowborough afterwards. I would come with an apidea mating hive. I would be there in two hours.

Instructions were given to her to put the Queen into a plastic box and give her a little honey from the hive she had come from. She was also instructed to harvest six or seven young furry bees so that this new Queen could be looked after. I told her not too much honey as it is possible for a young queen to drown in the honey she is trying to feed from. This new virgin did in fact become covered in honey even though Grace had only given her a small piece of



"Sticky Mess" newly born and fed some little honey.

comb: hence the name she was given – 'Sticky Mess' or 'Sticky' for short.

Two hours later I arrived. We went to her apiary and I showed her the apidea mating hive with the feeder compartment which we filled with fondant. We then harvested young bees by shaking them off a frame of brood into a large garden plastic trug. One has to be quite precise and about 300 mL of bees are needed. These are sprayed with water to make them easier to harvest and to give them some water to enable them to eat the fondant more easily. Instructions were given that the bees should be kept in the dark, locked up for two nights and two days. They should also be occasionally sprayed with water so that they could continue eating the fondant.

Hurray for Apideas

Grace followed my instructions to the letter and placed the small mating hive in her apiary three days later. I told her not to look for about three weeks and to keep her fingers crossed as these small mating hives are tricky. However two weeks later she checked and there were eggs. I told her I needed to know how many bees were in the apidea as if these



Sticky on an apidea frame. Notice distinctive orange banding on two segments.



Grace Walasek in the walled garden where she works.

mating hives become congested, the bees abscond. From the photo she sent they looked prosperous (all the bees that had been harvested had stayed with Sticky because Grace had respected the timings I had given her) so I suggested removing the feeder, adding two frames (I do like the versatility of apideas) and adding a top feeder. This she did even though it involved her in extra purchases. I told her that we should wait before moving her into a nuc as if there was sealed worker brood that would confirm that she had a fully mated Queen and we should only move her into a nuc at that stage. That she duly did and in a further week's time she was able to confirm that she had a mated Queen.

Of course having a mated Queen in a small mating hive gives you a whole new set of problems to deal with. She needs to grow into a unit that is big enough to survive the winter. Grace cleverly managed to attach the small



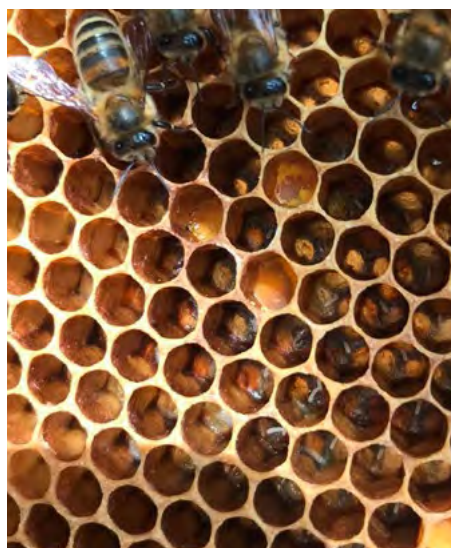
Apidea frames attached to a brood frame.

apidea frames into an empty brood frame and give the bees 2 frames of empty comb and a frame of stores plus a cellotex dummy board. 'Sticky' immediately started laying into the empty comb. I told her to feed them a cup full of syrup every 2 to 3 days in order to encourage them to grow. There was one tense moment when Grace informed me that in some cells there were two eggs. I told her, however, that sometimes new Queens, enthusiastic to lay, do in fact lay two eggs into the same cell. This proved to be the case.

A sting in the tale

Everything was going well but this unit was still a very small unit. On discussion I suggested that she might like to have one of my colonies and use the bees in order to boost Sticky and ensure that she and her progeny survived the winter. Grace seemed keen and duly came and fetched a colony that was surplus to my requirements from me in Kent Street, near Hastings.

This colony was placed in her apiary and I assumed everything was going well. I had left instructions for the use of apivar (a medicine used to reduce the number of Varroa mites in a colony) in the roof of the hive as my colony had two strips placed into what was a rather small brood nest. Grace wished to retrieve these instructions but when she removed the



Panic as there were double eggs in cells.



A sore arm after many stings.

hive strap to try and open the roof, she was attacked. She tells me, on reflection, that she should just have walked away. However she continued fiddling with the strap and was stung about 30 times on the arms through her bee suit.


Fortunately for me she put this down to experience. She also thought that perhaps the bees were trying to tell her something. That is always my first question when an incident like this happens. Had the bees become overheated on their journey up to her apiary because I had, after all, added the inspection board? Had the Queen been killed and had this rendered the bees tetchy and vindictive? I told her to remove the inspection board in case this behaviour was due to overheating and then thought of a plan of action.

She was told to leave the bees alone for two weeks. Then I told her with her husband to move the bees on a Monday morning to the other side of the apiary (as she now had three hives and a nucleus box in her apiary this made the following manipulation possible – the more hives you have the easier it is to confuse the bees). I would come on Thursday morning and we would then sort out the mess (timing is important if you wish to do this manipulation – two days is perfect). The reason I asked her to move the bees was that I

wished for the foragers (the stingers) to be lost. That would make the colony much more biddable and I would have a much greater chance of finding the Queen (if she was still there) and dispatching her. At that stage we would be able to combine Sticky with her new colony.

Thursday morning arrived. I opened the roof and there was no problem. The bees were calm and biddable. I found the Queen and probably to Grace's horror dispatched her there and then. Grace was organised and she had newspaper with her and also a brood box. We placed newspaper over the bees from my colony having smoked them down. We then added the brood box and then placed above the brood below, Sticky and her two frames of brood and one frame of stores. I added the crown board and the roof and told Grace to cross her fingers.

We also removed the hive stand where the nuc box containing Sticky and her bees had been sitting. If you don't do this all the flying bees from the nuc hang up on the stand and die. There was also a slab beneath the hive which evidently also smelt of home as bees were landing on it and so we also removed this as well (that way Sticky's foragers would go into the nearest hive and as they would be bearing gifts, they would be accepted).

A few days later Grace went to check if Queen cells were being drawn and if the bees had accepted Sticky as their new queen. The bees were calm and there was chewed up newspaper on the inspection board and there were no queen cells on the brood. Although Sticky was not seen there were eggs in cells and so she was in lay and present. The manipulation had worked! Grace combined everything so that they were only in one brood box. We are hoping that they overwinter well and that there is a strong colony that will collect her spring honey next year. What a journey this has been for 'Sticky', for me, and for Grace. 

DIY: Hive weighing scale

By Steve Davies

During winter preparations, our attention turns towards ensuring the bees have enough stores to last them through to Spring. Traditionally, beekeepers 'heft' their hives to assess the weight but this can be a bit 'hit or miss' especially if the beekeeper is in their first few years of experience.

A more reliable, and reassuring, method is to use scales to record the total hive weight. Often this entails weighing both sides of a hive and adding the totals to give an overall weight. Some of the more affordable scales do not last long and can give erratic readings.

I have a long-standing back problem which does not like lifting heavy hives whilst twisting to read the scale! A search on the Internet revealed the perfect scale which lifts the complete hive in one easy movement – watch it yourself on [Youtube](#).

Unfortunately, the 'inventor' lives in Croatia and when I last contacted him, he did not ship Internationally.

The next best, for me, is what I found in America on the site called "[Bee Hacker](#)". The beekeeper, Tom Rearick, is happy for others to use his design. I would recommend visiting both links but what follows is my interpretation of Tom's design.

Materials needed

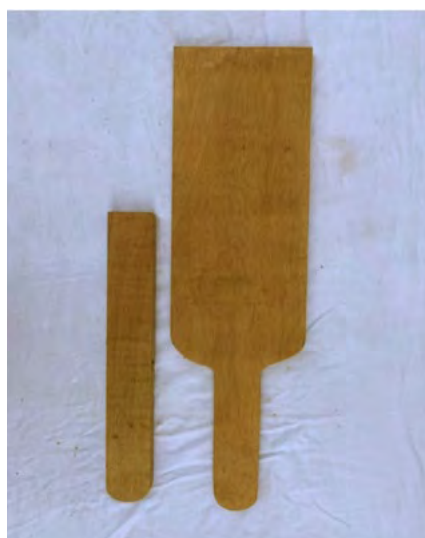
- 18mm thick plywood approximately 180mm x 300mm
- 2 x 100mm hinges
- 2 x angle brackets
- 3 x 150mm joining brackets
- 2 x corner repair plates
- 1 x good quality scale
- 1 x mini spirit level
- 1 x pulley wheel
- 1 x spool of wire rope
- 22 x M5 machine screws, washers and, preferably, nylon lock nuts
- 1 x eye bolt
- 1 x pronged tee nut and bolt

Method

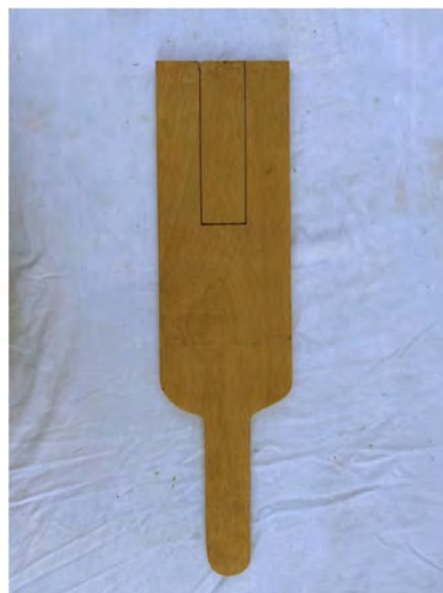
- First, cut a section of thick plywood approximately 600mm x 155mm. Divide equally into three parts, lengthways, and lightly mark with pencil. Measure down approximately 180mm from the top and mark across at right angles. Cut out the two outer pieces forming a paddle shape.
- On a separate piece of plywood, cut another piece approximately 400mm x 50mm. This will be the handle and needs to be the same width as the paddle handle.



The finished product is in residence at Slab Castle and I have the original. I also have a plywood 'template' should anyone be brave enough to try ...



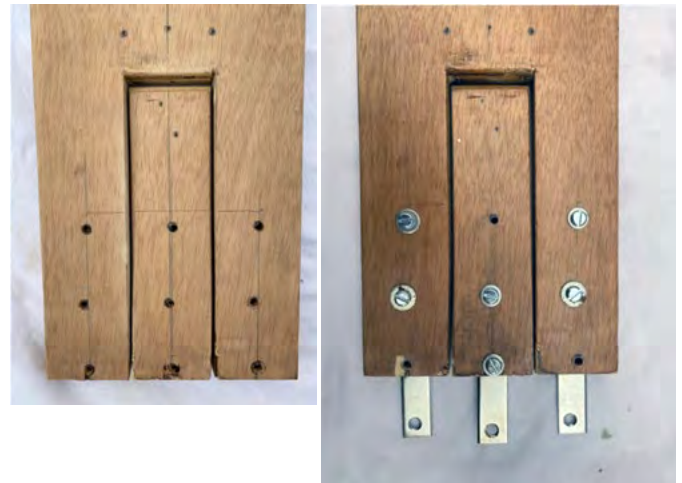
- NOTE: during construction I will use machine screws and standard bolts which are only hand tight. Once complete, I will then fit nylon lock nuts and tighten everything fully.
- Put the slim handle to one side for the moment. On the bottom edge of the main body, mark up approx 185mm but DO NOT CUT OUT.



- Position three 150mm mending plates centrally on each of the prongs; mark the screw holes and drill through.



this stage and paint/varnish all wooden components. Once done, fit the three metal mending plates to the underside of the paddle. Note the positions of the machine screws.



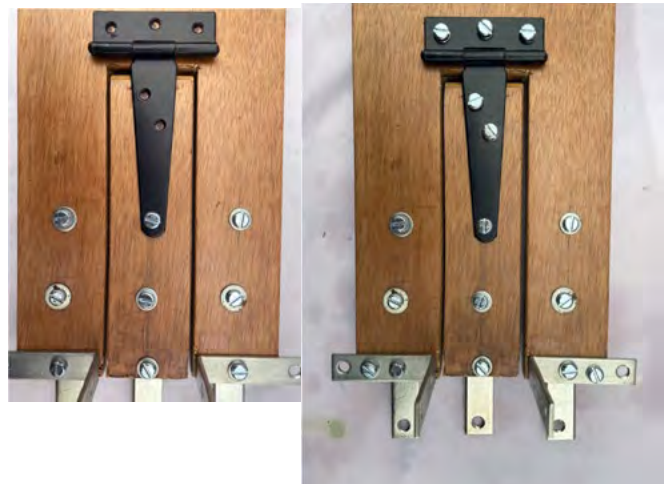
- Turn the board over and, on the top face, position both hinges. The lower hole of the bottom hinge needs to align with the top hole from the mending plate below. Apologies, it would be easier to understand if I had photographed the plates as well. Also, the top hinge is facing the wrong way but, hopefully all will become clear later. Mark the top edge of the middle prong just below the hinge body.

- Turn the board over and fit the two angle brackets into place aligning one of the holes directly onto the screw from the mending plate below. Make sure the brackets do not overlap the middle cut-out. Later, you will need to drill a second hole through the angle bracket and board to prevent twisting.



- Now, cut out the central 'prong'. The width of this needs to be reduced slightly as you do not want any binding when trying to lift. Also, round off the top edge for free rotation. NOTE: you may want to pause construction at

- Put the central 'prong' into position, secure the hinge at the bottom edge and mark all screw holes accordingly. Drill and screw the hinge to the paddle.



- Fit the remaining hinge to the handle you safely put to one side earlier ...



- Making sure both handles are in line, secure the lever handle to the paddle with the hinge on the underside.



- Next, you will need to dismantle a small pulley wheel. The wheel is the only part you need so carefully drill on the pin and discard all metalwork.



- The wheel will need to be fitted in line with the top hole of the angle brackets. You may need to drill the wheel slightly to accommodate the bolt and you will need to use your imagination for the spacers. I used offcuts from a metal net curtain pole but anything will do, just make sure the wheel can rotate freely.

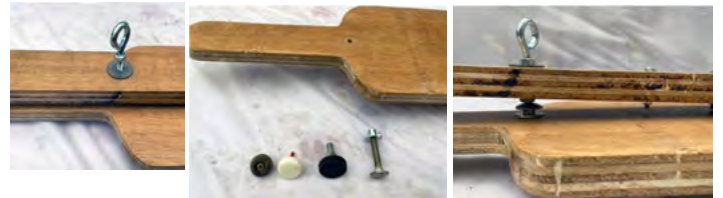


- The next stage is to add a stop bolt to ensure that you squeeze the handles the same amount each time you use the scales.

On the slim handle, drill a hole completely through and marking the paddle body. Thread a closed eye-bolt through the slim handle and secure with a nut on the underside. Cut off any protruding thread.

The nut needs to contact the paddle in a consistent manner and there are a variety of options available. The middle photo (left to right), screw on rubber foot, hammer on plastic foot, threaded foot from a discarded fridge, domed bolt and pronged tee nut.

I prefer the domed bolt method; drill a hole through the paddle in line with the eye-bolt, tap the pronged tee nut in place and thread through the domed nut. This gives a firm fixing yet allows you to adjust the gap between the handles to suit your grip.



- The scale is then connected to the eye-bolt using a short length of wire rope and secured with a wire clamp. Once you are satisfied with the position, fully tighten the wire clamp and wrap with tape to cover exposed wire etc. HINT – switch on the scale to ensure you connect it with the electronic readout facing you (one of my many Homer Simpson moments).



- Drill a small hole through the middle prong, just below the pulley wheel. Secure a long length of wire rope to the end of the scale again using wire clamps (as this takes a lot of weight, I would advise using two clamps for security).

Feed the wire rope over the pully and through the hole; loosen the nuts securing the metal prong slightly and



(this step continues on the next page)



wrap the wire rope around both bolts before tightening. You will need to test the operation under load and adjust the length of the wire rope to suit. You will be aiming for the handle eye-bolt/domed bolt to touch yet making sure the pulley wheel does not come into contact with the middle prong. Once satisfied, cut off the excess wire rope and again wrap the ends in tape.

NOTE: you will probably need to adjust again after a bit of use as everything settles into place...

- Test the unit under load and adjust if needed. Replace any 'ordinary' nuts with nylon locking nuts (alternatively, loosen each nut slightly, give a dab of Loctite 'Lock 'N Seal' then tighten fully). Cut off any exposed bolts and file down any sharp edges.
- Next, add a mini spirit level. Position it where it is easy to see and it really does make a difference to the readings!



- Finally, you will need to make a modified 'entrance block' to fit the back of the hive where you remove the varroa floor. Cut a piece of timber the same size as the gap then cut out a small section the same size as the metal prongs in the centre of one edge.



Using these scales is simplicity itself – remove the varroa floor, insert the modified entrance block, slide the scale prongs into the rebate as far as possible, squeeze the handles together and take the reading. The reading is then doubled to give you an estimate of the hive weight.

Although it won't give you a completely accurate figure, it will be consistent, and you'll be able to assess diminishing stores with each reading.

However, if you prefer to take readings from both sides and add together, you make a pair of thin 'entrance blocks' the length of the hive and place on each side under the floor.



Alternatively, cut a notch on the top faces of your hive stands for a permanent solution.

AMENDMENT

Although the above construction lasted a few years, I noticed that the angle brackets were bending towards the scales and giving false readings. Two solutions came to mind, either shorten the height of the brackets or add some supporting braces; I chose the latter.

- Using two corner repair brackets, fold over the bottom edge to provide a 'lip' (try to align the top hole of the bracket with the pulley wheel bolt). Cut out a notch to fit behind the pulley wheel bracket. You may also need to drill extra holes to fit the bolts.



- Remove the pulley wheel assembly and fit the support brackets in position. Fit the pulley wheel assembly then a second bolt to the support bracket ensuring it doesn't restrict movement of the middle prong.
- Once satisfied, screw the support brackets to the paddle board.



...and that's all there is to it, hope I didn't confuse you too much



Photo Paul Lindström

The eighth story in a multipart series called “Three Bees”

And then the cold came

By Laurel Lindström

When he woke up Curly was extremely cold, much colder than he had ever been before. Alone and on the edge of being able to move he was afraid. But he could feel the rising sun warming the wall of the hive and slowly he found he could move a little bit, then more as his body temperature rose above 9° C. Curly had spent the night quietly creeping as close as he dared towards the middle of the hive. He had moved cautiously amongst the almost sleeping bees, capturing meagre warmth as he went. The scent of propolis was calming and he could take sips of honey from uncapped cells as he moved amongst dozing workers. They noticed his slow comings and goings not at all. From his hiding place and as the sun rose higher, Curly watched the worker bees heading for the exit. He noticed that fewer than usual were going out to forage and wondered what was happening in his home.

Curly chewed on a sliver of propolis that he'd found on the floor during one of his nocturnal rambles. Sticky with honey it must've been broken off from somewhere when they were murdering the drones. “Wondering is what you do best,” he whispered to himself. “...it's your strength, your power. It's the only thing no other bee in this colony can do the way you do.” Then as an afterthought he said aloud “and it's what you must do now.” Curly thought the propolis might be useful for defence if the

workers found him, so he tucked it under a forelimb. It was somehow comforting. “Foolish boy” he said resuming his conversation with himself. “I'd have no chance. Propolis stick or not. I must understand what is going on and why everything seems to be slowing down.” Curly got himself in tight behind the broken and overhanging comb that had been his camp for the night to think it all through. He noted the facts: drones evicted from the hive, drones with their wings snipped off, drones going out and not coming home again. What could it mean, why were they not staying in the hive, especially now it was getting cold. He understood. They were being discarded. Curly didn't understand why, but he understands that drones still around once summer was over were surplus to requirements.

Curly was hungry again, but didn't dare move. He sucked on the sticky propolis, wondering why he felt so hungry when surely sleepy would have been more likely. Food. Food was obsessing him and his supply was strictly limited to the oversucked piece of old propolis. It's flavour reminded Curly of his younger days as a newly hatched drone, days when the sun warmed the hive all day long and darkness came only once he and his brothers were safe and asleep. Darkness and food, the one too much of and the other too little of, and the traffic in the hive getting thinner and the drone population

collapsed to nothing, soon only to him if he could stay hidden. Curly could hear them, still shoving out drones. Soon he sensed a new instruction to a platoon of workers. They were moving to the warmest part of the hive, in the middle where Mother and most of the brood were. They were charged with routing out any remaining drones still hiding in the hive.

Numbers were not Curly's strong suit, he was after all just a bee and a male bee at that. But he did understand the workings of his home, and that everything had a purpose and a function, and that everything contributed to the well-being of the colony. The purpose of drones was to do something on the outside, something that only the best of drones could do. For the rest of them, they had no further use in the hive so they were dispensable. It was just a matter of time before the drone patrol found him, or he became immobilised as the temperature fell. He had managed to keep moving by stealth in the night, but that was never going to work long term. He was already exhausted. Curly understood that there were two options: die of starvation and cold, cowering in a secret corner of the hive, or let the drone patrol find and savage him before throwing him out of the hive.

But there must be some other possibility, he thought to himself. That possibility could lie in some sort of negotiation. “I'll talk to them” he

said shivering as the chill sunk into his joints, slowing his blood, softening his senses. But who should he talk to? Who is in charge of the drone patrol and why? Who decides that the drones must go? Curly crept out from his sticky shelter and started cleaning off the honey, not just because he was hungry and it was so very tasty. He wanted to look his best, his most impressive, big, strong, smart. His antennae were droopy though and he was overwhelmed with apathy, a laziness in his body that his sleepy mind struggled to overcome. As he moved he felt warmer, but he could only move slowly through the crowds of workers. He did his best to move as he and his brothers used to move: with confidence and self-assurance, fearless. Only the drone patrols knew that they were to catch drones, so the rest of the bees kept busy with their various tasks. The reasoning was sound and Curly soon found himself in the midst of a mass of workers, struggling to get to a group of hungry grubs. Curly passed over numerous cells wherein he could see tiny specks, eggs, eggs that had only recently been laid soon to be nurtured into grubs and hatch as fully formed bees.

Then he had it. "Mother" he said aloud and twittered his antennae in response to the added buzz of a few hundred workers, turning their antennae towards him. It took no more than a few seconds for a bossy worker bee to signal to Mother, although what the signal meant baffled Curly because Mother did not appear. Instead a group of seven, slightly rough looking bees approached him. Curly knew that as soon as the seven sisters recognised him as a drone, that he would have to talk fast. He sensed that the drone patrol was already coming for him. Best to start the conversation immediately before the seven or the patrol reached him. "You need me" he said, watching the movement of their antennae, trying to divine what they were thinking.

The movements were subtle, invisible almost. Slightly louder and with more patience he called to them "Mother needs me. You all need me, because I am bigger than you but don't need so much food". Curly had no idea where that had come from, nor did he really understand what he was saying. The seven sisters had Curly in a tight ring, antennae now straight up and forward, faces expressionless, forelimbs interlinked. They did not speak, they just held him there, penned and waiting for the drone patrol to arrive. Curly could see Mother coming slowly closer, her entourage fussing, cleaning, feeding, grooming her as the small group approached the seven sisters. Curly heard a lazy drawl "what is it, what do you want now, isn't it enough that these cells are all full of my lovely eggs, of lovely grubs. What else do you want?" "Take her away" Curly heard a nearby voice growl. It came from the ring of bees around him, but none of them appeared to have spoken. "Now" a hiss came from another direction, as Mother drifted off to sleep a hindleg dipped into an empty cell. The group of courtiers, gave her a little shove and then a couple of kicks to get the massive bee moving on, as instructed. Curly was speaking fast, desperate to convince the seven to call off the patrol. "I can help with the cold. I can help keep her warm, and the brood. I can. I can keep her laying. You need me. I can help the colony survive. It's getting colder, you know this. You need me."

Curly felt his voice rising and struggled to keep it below the pitch of a squeak, tried to pretend he was Burly, big and handsome. He watched and the seven sisters remained still, implacable and Curly had the sense that some other communication, something beyond the pheromone transmissions, beyond clicking mandibles or antennae was going on. It was just a thickening of the air, a pause in breathing perhaps, but then Curly understood that he should con-

tinue. He squared his little shoulders and held his antennae steady, still. He said "I can help keep you warm, Mother, the brood, the brood, I can help the brood." Mother's entourage were still pulling her leg from the honey cell, and as it dribbled out Curly heard her sigh as she slowly turned to face him, head lolling, her attendants frantically cleaning off the honey from her wayward leg.

Ever since Curly, Burly and Twirly had been born all those weeks ago, Curly had noticed that the most important things in his colony were keeping Mother laying, and raising her brood which involved constant attention, recipe finessing and work. It was the brood that grew into worker bees or drones, depending on the diet the nursing bees fed them. It was the brood that would matter most if the hive continued to get colder and darker as the days progressed. Now he was hearing or sensing that what mattered most in what Curly had said was the word "brood". He continued without really knowing what he was talking about, repeating and repeating that "I can help keep the brood warm, keep them safe. I am a drone that can do more than any other drone, a drone to help the brood." As he said this the drone patrol arrived and immediately halted some few honeycomb cells away from Curly's circle of seven sisters. He could sense some hesitation, some sudden reluctance to get closer to the circle. And then the seven moved away and the drone patrol surrounded Curly. His heart was pumping and he instinctively tucked in his wings as tight as they would go as the circle drew tighter, and then inexplicably the bees turned their backs on him. As one, they turned to face away, drawing up their antennae and tightening the ring around Curly. They locked arms.


Curly's first instinct was to panic and reach for his propolis stick, but then he reasoned, "why are they facing away from me, blocking me



in yes, but attacking me, no. And my stick is stuck to my abdomen. And they are locked, so I cannot get away, but I am also protected." As he mulled over what this meant for his future health and well-being, Curly saw the seven sisters unbundle from their huddle and move in his direction. The platoon ring opened to form a horseshoe and the sisters approached. They bowed their antennae in polite greeting and Curly understood that he had to explain what he meant by keeping the brood safe. The platoon had turned around again and were facing towards him, their eyes brimming with unspoken, unseen menace. "You need bees to keep the hive warm. You need the brood at the heart of the nest and insulation against the cold. You need to know when it's too cold at the outer layer, so you can move bees in and get new ones at the edge and you need to do that before they are immobilised with the cold." "The cold? What's the cold got to do with it. We keep them warm until the next group of bees comes to keep the brood warm."

Up to this point Curly had been guessing that the only way the brood could survive the cold is if the bees somehow block the cold air so that it didn't reach the brood. But his night in his chilly corner had taught him that at a certain point, lethargy and tiredness threaten to take over. Many times when he had tried to move he had found it almost impossible, despite his every effort. Eventually he had worked out that there was a certain point of coldness at which his body became immobile. The bees were waiting. "You see," said Curly

with increasing confidence, "The bees in the outer layer, might not always be able to move inwards, they might leave it too late, forget, or doze off. When that happens they die and you lose bees that might otherwise help keep the brood warm. I know when they should move. I can tell them, warn them that it's time to go in closer to the heart of the nest to recover from the cold." The seven sisters were silent, antennae still eyes searching to see some trick or secret, but there was none. There was just a clever drone, explaining something that they previously had never understood: why did so many of their sisters die when the cold came, even if they were chatting energetically shortly before they fell to the floor of the hive, alive but silent and immobile. They were always dead soon after. Curly stood up a little prouder, a little more himself and added "All I ask is to be allowed to help save the brood, if the cold and the darkness get worse." He looked at each of the seven earnestly before adding: "All I need is enough food to survive and a place to stay, but not outside." Then I can manage the changeovers so that you get the best possible protection as a colony, as guardians of Mother and the brood, when the cold comes."

The seven sisters turned their heads and formed a tight circle. Antennae were bristling, hind legs scratching backs and wings lifting and falling as they considered Curly's proposal. They understood that they had little to lose. There were plenty of stores and the Giant Grub had put a lump of sugar paste at the top of the hive, just under the roof. Food wasn't a problem. The concern was the efficiency of what Curly was proposing. "Wise one, we understand" Curly heard and awash with a new sensation he understood too, as did the drone patrol and all the workers in the hive. Mother even understood. Curly the Wise One could keep his wings and stay. 

A brief summary of the latest HWBKA Committee meeting

Some changes to the Constitution have been suggested. These will be presented at the AGM on 28 November.

For next years Beginners' Course we plan to supply up to 10 nucs through our association, much thanks to John Miller who has offered to raise those colonies. HWBKA will buy the nucs. More nucs can be supplied through other members if needed, but this will be a great help to the beginners and ensure that fewer colonies might be imported by beginners from abroad. Those colonies including the nuc will be sold to the beginners at an attractive price.

A queen rearing course is planned for 2022 to follow up the one held this year at the Horsted Green Park apiary. It's believed that local queen rearing is a strategic activity and well worth teaching to as many members as possible.

A Christmas lunch or dinner is planned, depending on covid rules of course.

A standing list of helpers on work parties is needed. Over the year there is much work needed at the apiaries, and the apiary managers need to know that there are a good size group of members who are willing to contribute to this.

The AGM and Honeyshow will take place Sunday 28 November at the Five Ashes Village Hall. Please register through this form at [the HWBKA website](#).

A brief HWBKA Committee meeting was held on 14 October, but mainly focused on preparations for the AGM. The next committee meeting will take place **Thursday 13 January 2022** – please suggest topics we should discuss via the email address: the.hwbka+chair@gmail.com. 