

Beetalk March 2023

General info and news about bees

Hello and welcome.

Beetalk is a compilation of news from across the bee keeping word.

Its not affiliated to any beekeeping group so you wont get things like the next meeting and what we are doing and such like.

I hope that the articles provided will be useful to anyone interested in the a rewarding hobby and in some way we also hope that you may gain some pleasure in reading some of the article that are included.

Also I intend to include articles that may be helpful to anyone new to this wonderful hobby.

Being based in Lancashire it would be great for any contributions from Beekeepers from the county. But as stated above, please nothing about your association or group.

Hope you enjoy. And to everyone of our readers. Have a great Christmas and all the best wishes for the coming year, both in health, wealth and happiness, and may your beekeeping year be a great one.

Michael Birt (Editor)

If you have any articles that you think may be useful to have included in Beetalk.

Please e-mail them to the editor

at

birt_192@hotmail.co.uk

POLY BEEHIVES- THE FUTURE...?



Imagine a hive that requires minimal maintenance, out performs traditional materials and doesn't rot. Imagine also that it is cheaper than its timber equivalent... In this article, I am going to attempt to give some feedback on my experiences of using polystyrene bee hives and nucleus boxes. Poly hives have been around for a long time now certainly 15 years+, perhaps considerably longer on the continent and in the USA. In the past, they needed to be produced in huge numbers for efficiency and British National sizes were unavailable for many years due to a lack of demand/volume.

There are now several manufacturers and stockists (including Claro Bees) of our more common sizes. The early ones got bad press because they were made from a lightweight polystyrene.

I have had mine now for 3 or 4 seasons, 2 nucleus boxes and a Langstroth Jumbo hive. If you have not handled them, you may be surprised by the density of the polystyrene- it is not the small beaded packaging type material. Everything poly I have has bees in at the moment, otherwise I would demonstrate the strength by standing on the hive. It is recommended to paint poly hives to protect them from UV light and to extend their life. Any water based paint can be used- I didn't have any suitable dregs at home, so bought a tin of masonry paint so that everything could match.

A small tray and roller made short work of it. Don't paint the insides, just the externals. A 5L tin goes a LONG way! The other significant advantage of painting them is that it camouflages the hives which in bright white would stand out in the corner of a field etc. When looking at buying poly hives, ensure that there are no location lugs between the brood boxes and supers.

They look like a god idea but are a pain, and prevent you sliding the super into its final place. (The CB stock do not have this feature) I have had several seasons through my poly hive, so I can offer the following insights:

1. Spring build up compared with a wooden hive is noticeably quicker.

- 2. The hives therefore become larger quicker and do show signs of wanting to swarm a little sooner. This is an advantage if you want to make splits or using the colony for queen rearing.
 - 3. Bees in poly hive uses less winter feed than wooden equivalent.
 - 4. My bees have been treated with oxalic acid over winter with no noticeable effect on the hives.
 - 5. Weak colonies have survived over winter in poly where they would have had no chance in wood. It is probably bad beekeeping practice to have not united with another colony but sometimes life gets in the way.
 - 6. They are ideal if you are moving hives from location to location- put a couple of straps around them and off you go- mine has a couple of recesses for straps to go.
 - 7. I have never known a roof to blow off. I do put a block pavior/brick on top to add a bit of weight, just in case.
- 8. (Claro Bees) National poly hives are compatible with the wooden parts, so if you want to use poly brood and wooden supers, you can. It also allows you to utilise your existing kit. Other sizes would need checking because you come across variants in hive sizes- Jumbo Langstroth that take Dadant sized frames but less of them.
- 9. Price- a poly hive comprising a brood box, floor, roof and 2 supers from Claro bees is £90. The "standard quality" wooden equivalent is £101. There are greater bargains still to be had if you go away from BS sizes and onto Langstroth, although that is the subject of next issue's article.
- 10. If they need any assembly (some manufacturers hives do, some are 1 piece boxes) then this can be done by even a small child and requires no tools. It can be done in the living room whilst not interrupting the sleeping baby- imagine doing so with a wooden hive...!
 - 11. Lifespan of poly is in excess of 15 years. Timber hives, if treated and stored correctly may be nearer to 50 years. But I can live with 15-£90 over 15 years is less than a couple of pounds of honey a year.
 - 12. I may buy or make more wooden supers, but any other kit that I now buy will be poly.
- 13. Poly can be left out in all conditions, so there is no need to find dry storage for them. They do not rot, and do not soak up water like wood. They can be stored on the ground if necessary. Obviously with poly hives it is not possible to sterilise them with a blowlamp. They can be sterilised easily by scrubbing using a suitable disinfectant- I have used Virkon S, but others will be available.

Some care does need to be taken when using poly hives. If you leverage frame ends against the polystyrene, it will damage it.

Dropping a box from height onto a corner will risk cracking or damaging the boxes (can be repaired with a suitable glue). In 3 or 4 years, my boxes look as good as when they were received.

I have a couple of the 4 in 1 nuc boxes, which I find handy for all of the benefits above, and because they will take both frame sizes that I use. They can be used without modification, but would be far better with the ply divider replacing with a thinner one to avoid the side bar of a national frame going tight against it.

I have never quite got around to changing it though. In these, whilst it may not be good practice to do so, I have overwintered a small nucleus colony. I believe that it would not be possible to do in a wooden nuc box. If you are looking for another hive, I urge you to give the poly kit a try.

BUMBLEBEE CONSERVATION.



Bombus Hypnorum bees living in a birdbox

All beekeepers will be asked about bumblebees by friends or members of the public at some time. They are every bit as wonderful creatures as honeybees, and, being almost entirely feral, have to fend for themselves in all weathers. They face many of the same issues as honey bees from climate change and from changing farming practices.

There is a new species of bumblebee that has introduced itself into the UK from the continent in the last 11 years. This species is the tree bumble bee-bombus hypnorum. As its common name implies it prefers to nest above ground. It has been in our district for about 2-3 years, and in that time its numbers have increased very sharply. It is frequently found to be living in birdboxes, or in cavities in walls or roofs. This species is unique in that when the queens are getting ready to emerge from their nests, many drone bumblebees congregate around the nest entrance and whizz about, drawing attention to a nest that has being quietly going about its business for several months unnoticed.

Telephone requests to beekeepers to deal with these colonies are now a commonplace, and probably make up ap □ proaching half the calls to Swarmsearch. *Bombus Hypnorum* bees living in a birdbox 19 The long established species of bumblebees can also give rise to requests for help from members of the public. They sometimes nest in compost bins, or in garden sheds (usually in slightly decrepit sheds with holes in the walls) and can be unearthed when shrub roots or fence posts are removed. In the majority of cases people can be re-assured by the knowledge that the bees will die out and abandon the nest once the new queens have emerged and been mated.

However there is an increasing demand for services to remove the bumblebees when they are genuinely being a nuisance. This most often arises with the tree bumblebees living in a bird box that is low down, or close to a house entrance doorway. It is relatively straightforward to relocate colonies in bird boxes; the bees return home at dusk so if the entrance is closed, the whole box can be picked up and taken away to a more suitable location. The "3 mile" rule probably applies to the new location. Other colonies can also be removed approaching dusk, although this is a more time consuming and uncertain procedure.

Sladen in his book "The Humble Bee" first published in 1912, but republished recently, gives a concise but clear explanation of how to do it. Given the decline in bumblebee colony numbers, and the emergence of urban gardens as the major habitat for bumblebees, the provision of bumble bee nesting boxes has considerable attractions.

Unfortunately the bumblebee conservation trust has shown that the ready purchased and widely available wooden boxes are generally of no use The booklet "Making Nests for Bumblebees" and published by IBRA describes one more successful DIY design.



BEES IN A BIRD BOX

Those of us who deal with bee 'problems' in the summer, will be all too familiar with calls about bees having taken up residence in a bird box. I had a stand- up row with a woman in Ripon who told me that I had a duty to remove a small box of bumble bees from her back gar den. I declined and she said that if I wouldn't do it she knew someone else who would. Last autumn I had an e-mail from a man in Spofforth who said he had some bees in a bird box in his back garden. I gave him the usual advice that they were most likely to be bumble bees, that would be benign and non- aggressive and to leave them alone until they had dispersed from the box when he could do anything he liked eg move the box or block up the entrance. The man emailed back to say that they were honey bees and the bird box was not the usual small kind but a larger version intended for woodpeckers. He said that he (or I suspect more likely his wife) wanted them moved out of the garden. I agreed to go across to move them, and confirmed they were honey bees and tried to move the box from the trunk of a tree to 20 which it was firmly screwed. Unfortunately the screws were rusted in and I could not shift them. I told him that if he could remove the box, I would go over and collect it and this subsequently happened. So I had acquired a bird box of bees in October. I reckoned that I did not have time to try to move them out of the box into a hive and so I put them in the garden next to two National hives of bees that I was overwintering. The bees were active but not massively strong. I had some trouble trying to feed them – so merely gave them a little fondant. Anyway the bees, somewhat surprisingly, survived the winter and in the early summer (ie this year lousy weather but longer day length) I had the messy job of cutting out the comb and standing it in a nucleus box, and the bees have survived. The purpose of this account is to once again reinforce that however many text books we read or experts we consult, the bees are always ready to 'surprise' us. According to beekeeping 'lore' a colony needs 40lbs (plus) of stores to overwinter and at least 4 or 5 frames of bees. I suspect that the bird box had less than 10% of the recommended level of stores and not so many bees. I cannot claim that they survived due to any particular exper ☐ tise of mine, although we did have a relatively mild winter. If at the end of the year you have any small colonies of bees 'left over it might just be worth putting them somewhere suitable to see if they could survive in our unpredictable climate.

(There have been many, many reports of 'bees in a bird-box' this year. All the ones we attended turned out to be the relative newcomer, Bombus hypnorum, the Tree Bumblebee- she with the bright ginger thorax. The usual advice that 'bumble bees never bother anyone' sadly does not apply to this feisty bee! It is quite common for them to buzz and bomb anyone going near the nest entrance and they really do need to be moved sometimes. It sounds easy to block up the bird box hole and take the whole thing away, but so often these boxes have been in situ for donkeys years and when you try to move it you find the thing is rotten right through, it falls to bits in your hands and there are dozens of angry hypnorums defending their squatters rights! Grey tape, bits of foam block, plasticine etc are all good allies. When you have it down and safely wrapped up, you still have to find a suitable site for it with no passing traffic. If you have a small nucleus colony that you wish to over-winter, another possibility is to transfer the colony into a full brood box, and to put it over a larger colony over a split board and under the colony roof. The split board needs an entrance, facing in a different direction from the colony below, and with holes covered by mesh to let warm air pass through and to keep the two colonies separate. The heat from the colony below is a big boost to the smaller, nucleus colony. (Ed)

My First swarm

My first encounter with honey bees occurred some years ago when I was in my mid twenties. I'd noticed a cloud of something hovering above my garden which when settled in a shrub turned out to be a swarm of honey bees. My neighbour contacted an Apiarist who agreed to come and collect the swarm; he was very reassuring so I stayed with him and watched with fascination and asked him a long line of questions, the experience of that day helped instil my life long interest in honey bees. Over the years I've recounted the tale of the swarm being captured in my garden many times which is what gave my partner the idea of buying me a place on the bee keeping course with the Harrogate and Ripon Bee keeping Association (HRBKA) as a birthday gift. I attended the course but unfortunately due to circumstances at the time I didn't follow up the opportunity to get some bees at the end of it. However a chance phone call has since changed all that. Three weeks ago I received a call from a member of HRBKA asking me if I was available to collect a swarm from a nearby garden. I felt hesitant and thought how could I do that, but before I knew it I heard myself saying the words 'yes, I'll do it'! I then explained although I'd completed the course a couple of years ago I had never kept any bees nor had I ever collected a swarm but I was willing to give it a go. So armed with my brand new white suit, white sheet and cardboard box I was ready to go. I didn't feel nervous when I arrived at the house, perhaps just a little cautious; but when I was greeted by three very worried looking faces I immediately realised that this family did not want to hear that this was my first ever attempt at collecting a swarm nor that I hadn't even kept any bees of my own. So I decided the best way forward was for me to assume the posture of a confident, experienced beekeeper and I introduced myself with reassuring handshakes and a big smile. First I assessed the situation; the swarm was hanging from a horizontal branch close to the top of a leylandii tree which was roughly 10ft tall and situated on the other side of a tall fence, luckily for me it looked fairly straight forward. I was provided with a sturdy ladder before the residents of the house retreated indoors and watched the action from behind a glazed door. I ascended the ladder armed with my cardboard box, I had already smeared some honey inside it across the bottom although I had no idea if it would actually make any difference but I thought it couldn't harm and felt reassured in my own mind that it may help the bees accept the box as temporary lodgings. Once atop of the ladder I placed the box directly below the swarm then I gently raised the box until the swarm was dangling right in the centre. I took hold of the branch they were hanging from and gave it two sharp taps across the top of the box. I heard and felt the swarm fall into the box, I held it still for a moment to see if they were staying put and to my great relief and 'hidden' surprise they did. I dismounted the ladder slowly and placed the box gently down on the sheet I'd laid out earlier on the lawn, again I waited to make sure the bees were settled. While I was capturing the swarm one of the three residents had dared to come out and join me as I had assured him swarming bees are not aggressive as survival and maintaining their number is their highest priority at this stage, so throughout he asked a constant stream of questions which I did my best to answer; he reminded me of myself years ago and I wondered if he too would be recounting his own tale of watching a swarm being captured. I returned home with my box of bees wrapped up tightly inside the sheet; pleased with the successful capture but now doubting my ability to successfully transfer them into my not yet used hive. I'd made a ramp up to the hive entrance and laid the sheet over it. After a quick phone call to check I was using the correct technique I shook the bees out of the box on to the sheet then I sat and watched and waited. I noticed there was no trace of any honey left inside the box so I decided to try it again, this time I smeared a line of honey close to the top of the ramp and eventually the bees started the climb up to their new home. It's now been three weeks and after feeding 'my' bees almost 2 pints of syrup a day getting stung four times and being told by some beekeepers (not from HRBKA) at the Great Yorkshire Show that my hive could be queenless; I still haven't seen her but I have finally spotted eggs, unsealed brood and sealed brood, my queen is laying and I'm over the moon.

BEGINNERS BIT

This must be about the worst year ever for a beginner to try and get going with beekeeping! The bizarre weather patterns have caused all sorts of problems, with bees behaving very strangely in some cases.

Uncontrollable swarming has been happening, with queen cells sealed much sooner than usual, queens have apparently mated and started laying, then mysteriously disappear, without any emergency queen cells being built. Newly mated queens are as keen to swarm as their mothers were ..it just goes on. So, if you are a beginner who has had no idea what is going on in your hive, you are not alone!!

However, some beekeeping must carry on as usual-autumn feeding, winter preparations etc. The year's major nectar flows have just about finished by August, unless you live near heather or balsam. If you get a lot of that it is worth extracting, otherwise let the bees have the benefit of it. Do not take any honey from the brood box, that is for the bees winter stores. If there is no honey in the brood box and all the stores are in the super, leave that for the bees also.

Even so, after this incredibly wet year, you will probably have to feed as well. Feeding. Bees can need up to 40 or so pounds of stores to get through an average winter, and most of this should be honey. However, rock hard rape combs do not make good winter food as so much moisture is needed to utilise it.

They are also prone to separating into a mix of sugar crystals and watery syrup. This then starts to ferment, causing dysentery. This is serious if it is too cold for the bees to take a cleansing flight.

The same problems have been attributed to heather honey, with its higher moisture and pollen content. It is often recommended that sugar syrup be fed in September; the bees eat that first during the colder months and do not get to any doubtful honey until flying temperatures are more likely.

Small nucleii that need to build up for the winter can be fed through August, 'little and often' to stimulate the queen to continue laying. Larger colonies that fall short of 40lbs of stores can be given sufficient sugar syrup to make up the deficit all in one go at the beginning of September. They need time to convert it into 'honey,' and cap it over.

To estimate the amount of stores in the hive, examine each frame at a last inspection. A deep frame of honey, full on both sides, weighs about 5lb (2kg) You can estimate what the other frames hold using that as a guide. Experienced beekeepers can tell by 'hefting' (lifting) a hive from the back if it is too light to overwinter, but this is only a rough guide.

A hive with enough winter stores is too heavy to lift --70lbs+. It is much safer to gauge each comb separately The Chapter headings are Work, Sex, Politics, Food and Drink, Life and Death and finally the Beekeeper. What else is there in life? I found the chapter on politics the most enjoyable. Mankind has always been fascinated by the efficient social organisation of the honeybee colony, but until recent times has always put forward explanations to suit the political theories of the day.

To the Egyptians and Romans the large bee was a king or Pharaoh, and the workers were warriors with spears. It was not until Elizabethan times that Charles Butler established that the queen really was a queen and of course the workers all 'loved and adored her.' He even imagined a hierarchical system with some bees endowed with tufts and tassels indicative of the ranks required to impose the queen's will.

If you have not been able to do this, weigh the entire hive (minus roof stones) on each side, using luggage scales. Add the two weights together. Subtract 42 lbs for a double brood hive, 40 lbs for brood and a half, or 30 lbs for a single brood box.

The result is a good approximation of the stores in the hive. Sugar syrup for autumn feeding is called 'thick syrup'. It has twice as much sugar as so called spring or thin syrup, sometimes use for stimulative spring feeding.

Thick syrup is easy to make- simply use twice the volume of white granulated sugar to very hot water and stir well. 2lbs sugar to 1 pint water or 2kg to 1 litre of hot water are also quoted but are not precisely the same. This does not matter, so long as you know the total amount of sugar you have fed. Alternatively, with a contact feeder, fill with sugar nearly to the top, then add very hot water to a little above this and stir well. Use enough sugar to make the stores weight up to 40lbs.

Always make sure the sugar in the syrup is completely dissolved. Miller and Ashforth type feeders fit over the whole crownboard, under the roof, and take a couple of gallons of syrup. The bees have to come up through a slot, then down to the syrup to feed. 'Rapid feeders' work on the same principle, but only hold half a gallon and need an eke around them to support the roof. An empty super is quite suitable.

Contact feeders are basically a bucket with a mesh insert in the lid. They are upended over the feed hole in the crown board, and the bees suck the syrup through the mesh. They come in various sizes, the 1 gallon (5 litre) being most useful for winter feeding.

They also need an eke. Contact feeders are the best when the weather is cold, as the bees do not have to leave the cluster to feed. If one type of feeder doesn't work, try a different one. Don't rearrange the brood nest once feeding is completed, as the bees will have arranged the stores to their liking, surrounding the cluster on all sides. Varroa control is the other important autumn 'must do', if you have not already done so.

Some people are still using Bayvarol or Apistan, but they are not recommended for regular use as resistant mites are an increasing threat, so Apiguard or one of the other thymol based treatments are preferred.

Apiguard needs warmish temperatures or the bees will not take it down, so use it in August rather than September. This ensures that the all important 'winter' bees are hatched into a relatively varroa free environment. Oxalic acid treatment in December is another possibility.

Other routine autumn jobs are: Anti-robbing precautions-small entrances and no spilt honey in the apiary:

Mouse guards should be on by October: Open mesh floors can be left open for ventilation, unless you think your site is too wet and windy. Once the bees have clustered for the winter don't disturb them except to treat with oxalic acid in a sugar solution. Choose a cool, dry day and do it as quickly as possible.

DIARY OF A BEGINNER-A FIRST SPRING

End of March

I started beekeeping last summer with two hives and came through the winter with both intact, one having been overwintered on brood and a half.

On first inspection in the fine spell at the end of the month that hive was very full and active and I felt that coping with it might be a bit much in my first spring, with a good chance of losing or squashing the queen; far safer to work on a normal single brood. I had never found the queen and couldn't then so, bright idea, put in a queen excluder and check in a week.

If the new eggs and larvae were in the brood box, job done, if in the super there would be a much smaller area to search for the queen.

End of April

The weather had, of course, closed in and it was three/four weeks before I could inspect again. On inspection, sod's law applied and the brood was in the super which was absolutely bursting with extra comb everywhere, all the frames joined together and generally rather an overcrowded mess.

On the third run through I finally found the queen, marked her (another first achieved), popped her into the brood box and closed up with a sense of a job well done and a huge sigh of relief.

Early May

When next opened no queen and a lot less bees; they had swarmed.

On checking the super there were a number of queen cells, some of very odd shape, squashed into the overcrowded space which I had missed in my concentration on finding the queen.

I kept one nice looking uncapped one, took down the others, put the super frame with the queen cell on in the brood box and closed up. At the same time I found three queen cups with eggs in my second hive which I took down with the intention of doing an artificial swarm after the demonstration at the local association apairy.

Mid/End May

The local association apiary demonstration was postponed to the Sunday due to the weather I missed that to do my own hive that day as I had no other time available.

I did it by the book and, again, closed up feeling pleased, creating hive three. On checking mid way through the next week I found that things hadn't gone as well as I had hoped and that the old queen had cast from hive two.

Marvellous, three colonies, no queens and two queen cells.

But, when looking through the super in hive one in which I had trapped the queen, I was amazed to find two more well hidden capped queen cells in the overcrowded mess, one on the super wall and the other on a frame.

I had gone through that super carefully before and remain amazed at how they sneaked through, though lucky for me that they did. I cut the one off the wall of the super and stuck it onto a frame in hive two from which the queen had cast and put the other, which was on a frame, with another couple of frames of brood from the super, into my fourth and final brood box as a "mini nuc" by way of insurance. Four colonies, no queens and four queen cells. Progress?

Early June

Everything seems to be taking far longer than it should but, after several weeks of seeing noth \(\subseteq\) in finally found eggs, larvae and a queen (which I marked) in hive one and a queen (which I again marked), but no eggs or larvae as yet, in the "mini nuc", hive four.

On a careful check the queen cell that I pasted into hive two (which hadn't hatched) was ripped open down its back and so must have been rejected by the colony - or killed in transit. Hive three – still hoping, but it's been a long time now. Four colonies, two queens, one laying.

Definitely progress, but time to read up on uniting I think, certainly for hive two and maybe for hive three too.

Mid June

Hive one was up and running well with sufficient in a super for me to go mad and buy some basic extraction kit from Claro Bees. I united hive two onto hive four which had eggs and was looking hopeful.

Hive three continued to have lots of bees but no signs of anything else. I put a frame with eggs in from hive one but no emergency queen cell was built and repeated the exercise again (returning the first frame whence it came) some days later with the same result. However, joy, when checking the second frame for queen cells I saw the queen which I was hoping must be there.

She promptly escaped before I could mark her which, with the benefit of hindsight, was lucky as I didn't know if she was properly mated and having her flying smeared in marker wouldn't have helped – I was probably a bit quick to mark the queen in hive four the previous month. I also fed hives two and three due to the weather. Three colonies, three queens, two laying. Definite progress and time to breath again.

Beginning of July

Following the EFB occurrence in Harrogate, a visit from the bee inspector which confirmed a clean bill of health — fingers crossed. Whilst inspecting the hives with a quick glance, confirmed eggs in hive three (after he left I went back and spent longer than the bees liked with an LED torch and saw nothing — the learning/ability curve continues), recommended more feeding and confirmed that a super could come off hive one for a first taste.

So, three hives, three laying queens, a good starting point for any summer that we actually get and twelve jars of honey on the shelf. I feel I know a lot more than I did four months ago, a lot happier than I did two months ago and that I have a lot more to learn.

VARROA CORNER

August is the month when varroa counts can become very high and is the traditional time to treat for it. The aim is to have your bees largely clear of varroa by September when the queen will be laying eggs that will become healthy overwintering bees. It doesn't matter if you still hav Apiguards on at this time. I have been trying to monitor the natural mite drops in my colonies and they have been reassuringly low but what wi all the swarming, nucleus formation and queenless colonies I have had, it is difficult to be sure of varroa burdens in each hive. You are not the only beekeepers to have had these problems! On one recent occasion all varroa trays were obliterated by mould in 7 days and thus unreadable! collected two swarms, the big prime one dropped 70 mites with the Apiguard technique described in May, which to me means that it is moder ately susceptible to varroa. A few years ago I hived a swarm that dropped 1000 mites with Apiguard and continued to be a martyr to it. I have, last, got rid of this strain, having not allowed them to raise drones this year. The cast only dropped one mite which implies that it has more resistance. The cast, I'm pretty sure, came from a feral so maybe Natural Selection has been at work here. I will be monitoring the varroa in thi colony with interest. It may be that casts don't carry the same Varroa burdens as prime swarms. We just don't know. Treating swarms is well worthwhile because it firstly cleans them up and secondly gives you an idea of how resistant the strain is to varroa. In Aug/Sept. it is also wort cleaning up, with a single Apiguard for 2-3 weeks, any colony that is down to a single brood box by virtue of swarming or nucleus raising. Thi should keep that colony safe until Oxalic acid time in December. Classic Apiguard is a pretty effective treatment, at this time of year and involves putting on one opened tray above the brood box, using an eke, and replacing it with a fresh one two weeks later and leaving that on for another three weeks. The entrance should be reduced and varroa tray inserted to retain the Thymol vapour in the hive. Apiguard works well in Aug/Sept. Oxalic acid treatment in December (more in the November Apiarist) is a very effective treatment but too late to save colonies that an badly infested in August/September. The great problem is that the bees are probably still bringing in honey from Balsam or Heather in August and Apiguard cannot be used with supers on as it taints the honey. So what can you do? If a colony is only lightly infested with mite counts of less than 1/day in August, you could chance it and wait until December and treat with Oxalic acid. If more heavily infested, you could set a dat say mid August, hope for 3 days of bad weather so that the bees can ripen up any new honey, put the clearer boards on and remove the supers and treat with Apiguard as above, once the bees have cleaned the wet combs . You should then monitor mite drops in November to get an idea how badly infested each colony is. A common treatment policy emerging is to de-bulk mites with Apiguard in Aug□Sept. and finish them off with Oxalic acid in December. Do count your mite trays 2 days after putting on Apiguard to see how many phoretic mites you had and then rea the trays weekly and tot up the grand total at the end of treatment. In a highly susceptible colony this could be thousands! As always, keep an ey out for strong colonies that just don't seem to get much varroa, you may have a resistant strain of bee to breed from. If they really don't get muc varroa and are dropping less than 2 per week, don't treat but keep monitoring them. They can always be treat □ed in December or next spring i it gets out of hand. Conversely, if a colony keeps on having high mite counts or needs any radical treatment mark them down for de-queening and uniting with a better strain before they start producing drones at the beginning of next year. Because it is impossible to choose the male line and the fact that honeybees cannot tolerate inbreeding, I have come to the conclusion that we should concentrate on removing the most susceptible strains in the herd, in the same way that Natural Selection would and, of course breed from those stocks that seem more resistant.

I am Beekeeping Volunteer....

I am a mum and most women will know what I am talking about being a mum (with an absent husband working all over the world)

I am chief cook, bottle washer, mender of hearts (teenage children), taxi driver, hairdresser, PA, carer (elderly parents), nurse, seamstress, etc, may not be the best and I certainly don't have a great deal of knowledge as I have only been at it a short time, so I have devised a cunning way getting one to one tuition from members of the HRBKA.

It's quite simple; I volunteer to help out with the various shows the Association is involved with and I ask questions. I am also asked questions by the public and if I don't have the answer I get the answer from another volunteer on the stand. It's great getting to know everyone that's ther I found myself talking to a member of the public at the spring flower show and heard myself answering the questions with some degree of knowledge. Wow, get me, I actually know the answer to this inquiry - wonders will never cease.

The best bit though is finding people like the very lovely gentleman who asked me had I heard of a hive called Burgess Supreme from Exeter, then went on tell me the story of how he had obtained two of these things of beauty with perfect joinery and glass. He had received them from a elderly gent retiring from Bee Keeping and had looked after them beautifully. The Bees are very happy in their deluxe apartment and probably feel they are of the upper echelon in such luxury.

I wanted to find out more about this Hive and found myself talking to the president of the Devon BKA, Mr Roger Lacey, who very kindly gave me some information about Burgess and Son. Mr Lacey thinks they started producing the Supreme about 1910 and the advertisement says the business was founded 1863. It's great to think at least two of their hives are still in use.! All this was well before Brother Adam brought Bee Keeping to Buckfast Abbey. which is not that far from Exeter. This Advertisement below for Burgess & Son Beekeeping Equipment in Exete from 1915 was during the First World War. I Burgess was a bee equipment manufacturer in the early 1900's in Exeter and this photo of the from cover is dated around 1915. At that time a Burgess Perfection W.B.C. hive was 48 shillings and sixpence, and a framed glass quilt was 4/6d. Current Thornes prices are £356 and £16 respectively! 28 The company was bought by a Bill Smith around 1960, and he and his Mum expanded the business moving to Mortenhampsted and then to Okehampton. Regrettably

Bill died in his 40's from a brain tumour, and his Mum sold the business and it is now National Bee Supplies. All this information was given to me and much more on general and specific areas of Bee Keeping ,just because I volunteered to help man the odd stands now and again, So, if you feel you could learn a little or a lot more about the world of Bee Keeping, come on in the water is lovely.!



Varroa Resistance to Apistan/Bayvarol Test Method (Data from Central Science Laboratory)

In many areas Varroa mites are now resistant to synthetic pyrethroids such as Apistan. Unless you know that the mites in your area are resistant, it would be a worthwhile task if Presidents of Local Associations could ensure that a test is carried out in their local area.

The test is within the capability of an experienced beekeeper. Results can be published in the magazine to make members aware of whether or not these treatments are still viable in their area.

This document describes a simple test (a variation of the USA Dept of Ag. Beltsville method), to check if Varroa mites are resistant to Apistan. Note: Apistan resistant mites will almost invariably also be resistant to Bayvarol. Precautions

– Use disposable gloves when handling insecticidal materials.

Test Method

- 1. Cut a 9mm x 25mm piece from a fresh Apistan strip and staple it to the centre of a piece of thin card about 75mm x 125mm in size.
 - 2. Place the card in a 500ml jar, or 1lb honey jar, curved around the circumference of the jar with the strip facing inwards.
- 3. Prepare a 2-3mm mesh cover to close the jar. Plastic greenhouse shading mesh is ideal. Cut a piece larger than the opening so that it can be folded down the outside of the jar and secured using a strong elastic band. Must be secure enough so as not to come off when the jar is inverted and shaken.
- 4. Take precautions not to sample the queen. Shake adult bees from 1 or 2 brood combs into a container such as an upturned roof or washing up bowl. Gently scoop up bees with Varroa Resistance to Apistan/Bayvarol Test Method (Data from Central Science Laboratory) the jar until it is half-full.
 - 5. Place a sugar cube in the jar and seal off using the mesh. Store in the dark at room temperature with the mesh uppermost.
- 6. After 24 hours hit the upturned jar with the palm of your hand over white paper. Repeat two more times to dislodge any mites Count the mites knocked out.
 - 7. Immerse the bees in the jar into a solution of water and washing up liquid (strong washing up strength).
- 8. Wash the dead bees to remove any remaining mites (these are the ones that have resisted the Apistan). Place the bees in a coarse kitchen sieve that will hold bees but let varroa mites through. Secure a honey, straining cloth or jelly bag under the sieve to retain the mites. Place under a fast running tap or tap with a shower fitting to wash any remaining mites off the bees. Count the number of mites washed off.

 Dispose of the dead bees and mites in a suitable way, such as composting.
 - 9. If the total number of mites is less than 5 discard the results.
 - 10. Calculate the efficacy as a percentage. Multiply the number of mites the Apistan has knocked down by 100 and divide by the total number of mites ie. the number knocked down plus those washed off.

If the answer is less than 50 per cent it indicates that a resistance problem is likely.

11. Please report the results to the secretary of your local association so that they can warn members not to depend on these treatments for Varroa control and to the magazine editor.

Above method based on CSL's test method - with acknowledgement.

YOU KNOW YOUR A BEEKEEPER WHEN

- 1. You're often seen dressed in a strange boiler suit and face mask.
- 2. You have answers ready, just in case, you are asked about subjects such as: Africanised bees, the differences between wasps and bees, and the value of local honey in preventing allergies.
 - 3. You check out all the honey labels and prices at the supermarket.
 - 4. You know that national hives are not itchy red patches on your skin.
 - 5. You've estimated just how much money you spent to control mites.
 - 6. Your friends and neighbours think you are the answer to, and sometimes the cause of, every swarm and bees-in-the-wall problem.
 - 7. You've scraped propolis and wax off places, such as your kitchen floor. 8. There is a bucket of something in your garage that can only be good for smoker fuel.
 - 9. You are called 'the Bee Man' or 'the Bee Lady' by people who don't know your name.
 - 10. You welcome a rainy weekend if it will stimulate nectar production.
 - 11. Your family and friends know exactly what they're going to get for Christmas.
 - 12. You don't mow the lawn because the bees are working the weeds.
 - 13 You drive down a road and find yourself evaluating the roadside flowers for their honey-producing potential.
 - 14. You come indoors smelling of smoke, although there is no bonfire.
 - 15. You know all about the benefits of a matriarchal society.
 - 16. You never stop marvelling at these wonderful creatures

Maybe I am soft, but I don't like the idea of killing queens. Isn't there a way of keeping queens for as long as possible, or am I just being naive?

Sometimes queens have to be removed from a colony, in order to re-queen, to improve colony temper or performance for example. However generally it is a good idea to hang onto the old queen, at least for some time, until the new queen is established. This guards against a spell of weather preventing a young virgin from getting mated or even from the odd loss of a virgin on a mating flight from a swallow or finch attack. In summer a spare queen can be 'stored' in a nucleus hive with three to five frames of bees. Traditionally mated young queens were stored in this way until needed and it was ideal if pairs of nucleus hives could be used. When a queen was removed from one for insertion into a full size colony, its bees could then be united with the second nucleus. This does however use up drawn frames and occupies bees in activities unlikely to produce a surplus of honey. Alternatively, young queens can be trapped temporarily in a hair-curler queen cage which is then pressed into a slot, cut into the comb in the centre of a super frame and kept above the queen excluder in a queen-right colony. The bees will attend to her through the cage. This will work for several weeks in the height of summer. Queen breeders sometimes use this method of temporarily storing or 'banking' young mated queens until they are ready for dispatch to customers, several dozen at a time in one hive. However, there will be times when it is required to send a queen to that great apiary in the sky and we should not be too anthropomorphic about killing a queen, after all it is no more of an event than accidentally squashing one of her sisters when reassembling a hive. As long as it is done quickly and surely, you should not shy away from doing it. Especially when uniting colonies you should always be the one who chooses which queen will remain (usually the younger one). In uniting two queen-right colonies of course the queens will fight and only one will survive, but left to them-selves there is no guarantee that it will be the youngest one and there is even an outside chance that the winner will be wounded. Some beekeepers also resist clipping the wings of queens, although this does not seem to distress the queen, provided only a quarter of the wing is removed. However occasionally the bees will decide to replace a clipped queen by supersedure (replacing the old queen by producing a new queen without swarming), probably sensing that their queen has been damaged. The reason for clipping wings is to stop swarms from departing – when the swarm leaves the hive the queen cannot fly and falls to the ground. The bees land with her and eventually return to the hive, the queen may be lost but it gives the beekeeper who can regularly visit his hives, the chance of avoiding the loss of half the colony via a swarm. However, it is more important in urban beekeeping that you practise swarm prevention by carrying out regular inspections especially in May and June, ensuring the bees have sufficient space and practising artificial swarming when the bees show signs of swarm preparation. This avoids alarming neighbours and also prevents the loss of valuable honey producing workforces. An additional benefit is the automatic replacement of brood comb on a regular basis, reducing the build-up of disease pathogens in old brood comb. Provided the operations of clipping and dispatching are carried out humanely they need not be avoided and remember, the queen is vital to the health, well being and productivity of the colony and you should ensure that you have young vibrant queens in all colonies – euthanasia is sometimes necessary.

FROM MY TRAVELS



PLASTIC FRAMES AND FOUNDATION

I saw quite a lot of these in use during my recent visit to New Zealand. Some beekeepers swear by them and others having tried them, have reverted back to using the wooden frames and pure beeswax to which we are accustomed. New foundation is dipped into melted wax to create a thin covering that enables the bees to make a quick start on drawing out the cells. With the solid foundation, frames can be scraped back to the mid rib without destroying the plastic base. This is particularly useful when exchanging brood frames. The frames clip together and are easily sterilised in some cases by pressurised steam. A good nectar flow and strong colonies are needed to ensure a well drawn out frame is produced. Plastic foundation is available in this country but I understand our environmental conditions have proved difficult for our bees to manage successfully.

Monitoring Feral Honey Bees in Scotland

FOLLOWING is my report on the state of the sites where feral honey-bees are or have recently been living in Scotland, which are monitored by my group of volunteers. Once again let me express my sincere gratitude to them for their continuing diligence in watching what is going on. The number of sites being monitored was 50 for this report, with 24 volunteers in all looking at them.

This report is considerably later than I had hoped it would be. I am sure that everyone is aware of the poor weather for bees we had this spring and during the first part of the summer. One consequence of this has been that, although I asked all the volunteers who are monitoring these sites where feral colonies of honey-bees are still living in Scotland to check on the sites in April, the responses were far later than the usual time of April/May.

I know that the site I am still monitoring could not reasonably be inspected until quite well on in May, and others were even later. However there has now been a fairly complete return on the sites that are currently on the active list, and below is a summary of where we are. The total number of sites on which I asked in April for information was 49. I have had reports on all but 6 of these now. Of the 43 sites I have heard about, 15 had been reported to me last autumn as dead, so could not reasonably be expected to have been re-colonised over the winter, and that was indeed the report I received about almost all these sites.

There was one exception, where the site, having been reported dead last autumn, was reported alive this spring. The explanation I favour is that when the volunteer looked at it in the autumn, it was rather too cold a day for bees obviously to be flying; yet in fact the colony was still alive then, and has after all wintered successfully. It remains to consider how many of the 29 sites I have had reports on, where bees were alive last autumn (including the one wrongly reported as dead last autumn), have successfully over-wintered and are reported still alive this year. Of these, 5 were sites which had been re-colonised by swarms last summer, after dying out the previous winter. The state of the 29 was that 21 are alive, and the remaining 8 are dead.

In two cases however, the colonies died out because they had been living within buildings which have undergone treatment over the winter aimed at deliberately exterminating the bees. They should therefore be left out of the calculations when we try to reckon the loss rate of feral colonies due to natural causes.

I summarise all this with a little more detail in the table which follows. What I find both interesting and encouraging in these figures is that the natural loss rate among these feral colonies is no worse, and in some cases is better, than the winter loss rates being reported by bee-keepers for their managed colonies. It looks as though the feral bees without our help are managing just as well as the bees we try to look after!

One small further point is I think worth mentioning. Of the 5 re-colonisations I have heard about, 4 were still alive in spring 2012, and one had died, so again these had a loss rate of 20%, very similar to that for the established feral colonies this year. Finally in case you had been wondering why there are only 49 sites dealt with in the report above, though I said at the beginning that there are 50 active sites, the reason is that one of the volunteers cleverly found a new site this spring where bees are alive.

That has now been added to the record, and must surely have survived the winter, but I shall not add it into the record of survivors for this winter, since no-one ever discovers new dead sites in the spring, so that to count it in would unbalance the calculations.

However I must now remove from the active list the two sites made permanently unavailable to bees, as reported above, and in one case the associated volunteer, who was not looking after any other site. So next time there will only be 48 sites being monitored by 23 volunteers, unless someone else comes forward of course.

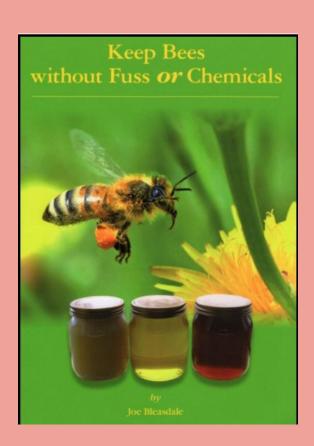
If anyone else knows of a site where feral honey-bees are living in Scotland, and would like to join the band of volunteers, then please get in touch with me, Magnus Peterson, Balhaldie House, High Street, Dunblane FK15 0ER; Tel 01786-822093; or most simply email zen90218@zen.co.uk, and I shall explain what needs to be done. It only involves checking up on the site in September and in April for as long as the scheme keeps going.

Region of Scotland	Colonies alive in Sep 2011 and reported in Spring 2012	Colonies reported alive in Sep 2011 and in sites still usable now	Colonies alive in April/ May 2012	Colonies naturally died	Colonies exterminated	Natural loss rate
North	13	12	9	3	1	3/12 (25%)
Central	9	8	6	2	1	2/8 (25%)
South	7	7	6	1	0	1/7 (14%)
Over-all	29	27	21	6	2	6/27 (22%)

Will they take the bait?

It was Saturday 9 June (fine at the time!) and just before noon. I was feeling calm and geared up for the journey down to my son's place in Kent – 207 miles. The house was in order, garden tidy - well reasonably so - but as I daily always do, I took a walk around the garden taking in the bees, ignition key in hand, ready for the off. After a few paces I heard what seemed very much like that characteristic buzz...and guess what? There was a swarm on the wing. In fact partially clustered from the ground upwards into a multi-stemmed viburnum 'Pink Lady' shrub with a very vigorous blue clematis growing through and crowning the shrub. There was no difficulty in deciding from which hive it had come, and it didn't really surprise me. It was the one I hadn't examined last time round as I had the other four. Why? The weather had got so bad, rain with very strong wind that particular afternoon and so it continued for about a week - up until I was setting off. I felt distinctly uneasy about leaving this hive without a check as it was very strong - my strongest colony, but I felt it had plenty of room, a brood and a half with a super wide spaced and capped plus a deep box with fully drawn new comb almost filled and about a third capped above the queen excluder. Well, I just couldn't bring myself to delay setting off, my son had got my ETA and I like to meet that otherwise he worries. So I quickly placed a brood box with some drawn comb with a board from the base of the swarm up to the hive, gave a good shake dislodging about a fifth of the number onto the board and they seemed to be moving up the board towards the hive when I got underway. I really left them to it and hoped for the best, but feeling slightly annoyed with myself for allowing this to happen; consoling myself that I'm most probably not the only member of our association who missed a timely inspection due to the rather persistent indifferent weather. Will they take the bait? Forward to Thursday evening the 14th and just back home. Our chairman, Martyn phoned to say that he and Hamish, had, in a most circuitous fashion heard about a swarm in my garden. It, the swarm, had rejected the offered home, did a circuit and landed nearby in a thick hedge. Gallantly Martyn and Hamish cut away a hole in the side of the hedge to get at the swarm but just could not gather it. Martyn was apologising for the hole in the hedge. Immediately after the call I walked up the garden and what...they were there at the rear and top of the hole. The next morning I tried the bait hive often talked about in the press. A brood box with open drawn combs on a stand about 15 paces away, thinking that they might move in there. Well, two days later, Saturday 16th, about midday I ventured into the garden and as I stood there, out they came from the hedge, milling around as a swarm does but obviously making for the bait hive - so neatly done and all over in about 20 minutes. I left them for two days when they were not only covering the seven frames in the bait hive but had also built a huge comb down from the crown board – which I removed and then made up the brood box to a full complement of 11 frames. It is only 12 July now and those original seven frames all contain brood, mostly sealed with their lovely straw-coloured cappings. The parent colony from which the swarm departed has a rather beautiful leather-coloured queen and still on the original brood and a half with six or seven deep combs with capped brood. All very nice to see and wonder at but, I would much preferred to have looked at the usual eight day intervals and carried out appropriate manipulations and kept the colony together and of course taking the opportunity to raise a 'surplus' queen or two from what I deemed to be the better colony

BOOK REVIEW



Beekeepers looking for an alternative to using chemicals with their bees will be disappointed with this book. The solution to the varroa problem apparently is to obtain swarms from feral colonies of bees that have overcome the problem by biting the mite's bodies or legs. There is however, no mention of ensuring that such a beneficial trait exist in the pages relating to swarms and certainly no suggestion that such swarms are isolated to ascertain their health situation. Nosema apparently will clear itself in a strong colony with a new queen. Transferring the colony to clean comb and thus reducing the need for the bees to clean up the mess and inadvertently spreading the disease, is never considered. But it is on the subject of the notifiable diseases, namely European and American Foul Brood that the author is seriously misleading. He wrongly indicates that the whole hive has to be destroyed if AFB is present whereas in fact, had he consulted the FERA guidance, he would have seen that it is just the bees and the frames. With EFB he says the colony should only be destroyed if the outbreak is serious. As it is a disease apparently caused by stress, it will be overcome as the season progresses, providing the queen is vigorous and the weather fine. Furthermore, according to the author, EFB is not notifiable. Such statements are irresponsible. To avoid 'unnecessary manipulation and disturbance of the brood' the author appears to look at his hives just five times a year. He briefly outlines the task undertaken at each visit. These are quite logical but it is remiss that there is no reference to queen rearing, blessed with their apparent grooming activities with the varroa. Increase is by splitting or creating nucs with no need to bother knowing where the queen is. She will appear in one or other of the divided hives. The stages of manipulation are easy for readers to follow and may help existing beekeepers to change some of those practices they find awkward

The author has drawn his own sketches to illustrate the text which adds a personal touch.

Top Bar Beekeeping.

I started keeping bees 30 years ago, after a friend left me to babysit his bees, and never returned for them. I had no mentor, no books and made lots of mistakes, slowly I got to grips with these little stinging insects, mostly by trial and error - mostly error. In about mid 2011, I got an email about a course being run on Top Bar Beekeeping (T.B.B.) this was being held in Peterculter, Aberdeenshire. Run over two days, it would cover all aspects of T.B.B. I enrolled and after attending the course decided to build my own hive during the winter months. In conventional beekeeping, we supply a box, (National, Smith etc.) for our bees to live in, we then install timber frames and sheets of embossed foundation, which the bees then draw out into honeycomb. When the colony needs more space to either allow the queen to lay in, or to pack away more honey, we add supers, vertically.



When you want to inspect the brood, you have to lift all the supers to get down to the brood box (s), and then rebuild the hive, this process does give some beekeepers back problems - something I don't yet suffer from! In T.B.B. the process is totally different, the box we supply is horizontal, and you do not install frames or sheets of foundation. You install only top bars, no side or bottom bars. This allows the bees to draw the foundation the size they require. In conventional hives, the foundation size (measured cell size) is 5.3 or 5.4 mm across the cell walls, in T.B. the bees dictate the size, my observations so far have shown that for worker cells they draw cells at 5.0 or 5.1 mm, for drones they produce cells at 6.1 or 6.2 mm. In my conventional beekeeping, I always over winter my bees in polystyrene brood boxes, with poly lids, as I want the inside of the hive to be totally condensation free. When it came to constructing my T.B. hive I had to allow a 50mm insulation panel to be fitted inside the timber frame, and the same in the roof section. This now means that the T.B. hive that I have designed and constructed is non movable, and quite heavy. In conventional beekeeping, the frame used is rectangular in shape while in top bar the inside walls of the hive are angled inwards, this copies the more natural shape a feral colony would build, this is called a Catenary section. To make the transition easier, the underside of the top bar is grooved and a shallow section of wax is installed to guide the bees, in the direction I want them to draw out the new structure. In early April this year I acquired a colony of bees from central Scotland, with a late July 2011 Queen, and introduced this to my new T.B. To make the transition easier, I got a standard National deep drawn frame, and cut through the side and bottom bars to take up the Catenary shape, this 'leg up' certainly gave the bees an easier start, I also feed the new occupants a heavy feed of diluted liquid Ambrossia and water. They have now drawn out eight full top bars, with a further two added to keep the pot boiling. The Queen is laying heavily, but the orientation of the hive is interesting, the drone laying has all been done on the first frame, at one end of the hive, all worker laying has been done throughout the remaining frames, but only in the lower section of each frame, leaving the upper area for the bees to fill with honey! I do realise that extracting honey will prove to be very difficult, as these frames cannot be spun out, the only way will be to press out the honey at the expense of the newly drawn comb. I would not recommend T.B.B. to a novice beekeeper, but I will continue this project, only as a means of broadening my knowledge of our little insect friends. I will submit a pre and post winter report to advise of the progress, or failure.



PLEASE SUPPORT THE FOLLOWING.

NORTHERN BEE BOOKS
OVER THE PAST TWENTY YEARS OR SO WE
BEEKEEPERS HAVE HAD
TREMENDOUS SUPPORT FROM NORTHERN BEE BOOKS. WE WOULD LIKE TO THANK
THEM BY

PUBLICISING THEIR WEBSITE
WWW.BEEDATA.COM
THE POSTAL ADDRESS IS:
NORTHERN BEE BOOKS
SCOUT BOTTOM FARM
MYTHOLMROYD
HEBDEN BRIDGE HX7 5JS
PHONE 01422 882751
BY THE WAY, THEIR
CONCESSIONARY RATE
www.beedata.com/beebooks.htm

UK Honey Labelling Regulations

Below is our simple advice on honey labelling. For more detailed information - go to the website of the Food Standards Agency. www.food.gov.uk 1. The Word "HONEY" is required.

- 2. The weight must be on the label we will ensure it is the legal size and format.
- 3. You can specify the area where the honey is produced. For example, Lincolnshire, Forest of Dean, Scottish Borders.
- 4. You can specify the type of honey. For example, Heather, Borage. The honey must be at least 75% of that particular type.
- 5. If you are selling the honey, you must have your name and address on the label. It does not need to be complete but you should be able to be found from the information.
- 6. If you are selling the honey through a third party, you must have a lot number.
- 7. New for 2003 You must have a best before date on the jar. We suggest 2-5 years from now.
 - 8. New for 2003 You must have a country of origin on the jar. For example Produce of England, Product of Scotland, Harvested in Wales. Adding the country to the end of your address is not

acceptable.

E H Thorne (Beehives) Ltd disclaims all responsibility for all consequences of any person acting on, or refraining from acting in reliance on, information contained above.

From EH Thorne's online catalogue 2010 - other sources are available