

BBKA News

The newsletter of The British Beekeepers' Association,
incorporating the **BRITISH BEE JOURNAL**



No: 198 – February 2012



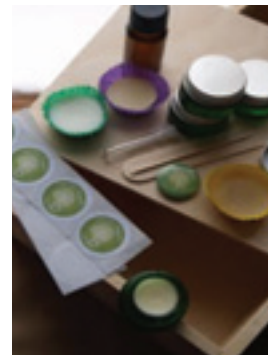
Photo by Roger Cullum-Kenyon

Are We to Lose Fumidil B?

For several years there have been rumours that Fumidil B (fumagillin) will be taken off the market as it has been in many other EU countries. While Fumidil B has been successfully used in the UK with a good safety record and no known adverse reactions, it feels the full weight of EU veterinary medicines regulations because it is used to treat disease in a 'food producing animal'. It thus must have an established Maximum Residue Level (MRL). CEVA, Fumidil B's manufacturer, has submitted data to the UK regulatory body, the Veterinary Medicines Directorate (VMD), but to date this has not been sufficient to meet requirements for an MRL. CEVA has now reluctantly concluded that it cannot justify the substantial costs of generating the MRL data (a six figure sum) given the small size of the bee medicines market, and thus will give up the licence and withdraw the product from the UK market. It is awaiting a letter from the Defra Minister withdrawing the licence. Once the licence is withdrawn suppliers will have six months in which to sell remaining stocks; beekeepers will be able to use the product up to its stated expiry date.

Fumidil B is one of the few licensed bee medicines available in the UK and the only one specifically approved for the treatment of nosemosis. Nosema infection appears to be becoming more common and is suggested to play a role in colony losses. The BBKA has consistently expressed concern over the fate of Fumidil B, calling for LINK-type research funding in our 2009 *Honey Bee Health Research Concepts* document to help carry out the work needed to establish the MRL. The matter has been raised subsequently many times directly with the VMD and via the Healthy Bees Plan Project Management Board, with no result to date. At the eleventh hour we have now written to the Ministers concerned in bee health and animal health appealing for a 'stay of execution' to keep Fumidil B available, pending an urgent examination of how the data might be generated in an economically viable way and to avoid the retrograde step of losing an important medicine. We will report back as soon as we have more news.

Tim Lovett



Hive products: Beeswax

A new series showing you the range of uses for various hive products. This month we learn how to make lip balms, page 8.



Solitary bees

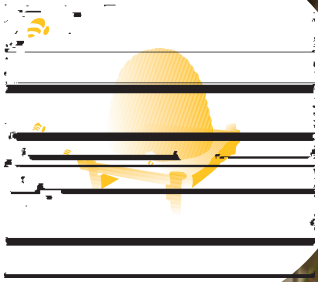
There are 18,000 solitary bee species — and rising! Find out about these non-social bees in our new series on page 15.



Difficult colonies

Need advice about how to handle an aggressive and difficult colony? Help is at hand from a Master Beekeeper, see page 23.





NATIONAL BEE SUPPLIES

Makers of the finest quality Bee Hives

For hives and a full range of bee-keeping equipment. We promise you the best quality and value – backed by our no quibble money back guarantee if you are anything less than 100% satisfied. With prompt Nationwide delivery service and all major credit cards accepted.

For expert advice and a friendly service

Tel: 01837 54084 Fax: 01837 54085 Email: info@beekeeping.co.uk



The new 2011 Catalogue is out now!

**Buy online at
www.beekeeping.co.uk**

National Bee Supplies

Merrivale Road Exeter Road Industrial Estate Okehampton Devon EX20 1UD



President's Letter



I am writing this article prior to the Annual Delegates' Meeting so please forgive my presumption in thanking all of you who supported my sole nomination for the BBKA President. I feel honoured and privileged to be representing the BBKA in this prestigious role. When I consider that I am one of only three beekeepers, who have served the BBKA both in positions of President and General Secretary, I feel very humble. The circumstances become even more daunting knowing the other two beekeepers were the luminaries TW Cowan and my dear friend Cecil Tonsley.

In the years following the Second World War many folk were attracted to our craft for one reason and one reason alone: sugar. When I started beekeeping in the sixties, the principal *raison d'être* to have a hive of bees at the bottom of the garden was the free jar of home produced honey. This was, of course, a fallacy in itself, as by the time you had amassed all the hives, equipment and bees it took some time for the honey to be truly free. Today there are many and varied reasons why so many are attracted to this ancient craft. It is no longer just for an interest in bees and beekeeping, but also knowing that you are contributing to plant pollination by recognising and helping to control the latest threats to bee health. While some are doing their bit to save the planet by keeping honey bees for others it is simply a green activity that gets one closer to nature.

The BBKA recognises these changes and realises that honey production is often no longer the driving motive to keep honey bees. The BBKA has recently developed some excellent educational material but I believe we need to do more to support and nurture the newer members to the craft, especially during their first few years. This can be achieved by encouraging more training by experienced beekeepers at a local level. This does not require reinventing the wheel as the process already exists within a number of branch and area associations. I hope that the BBKA might do more to be involved in the sharing of these best practices. The benefits are obvious in retaining new beekeepers and increasing the pool of beekeeping skills within our membership.

Fundraising initiatives have enabled the BBKA to provide financial support for ground breaking research into pests and diseases of the honey bee, but in today's economic climate living within your means is the order of the day. The BBKA's income stream has changed dramatically over recent years with now less than half coming from members' capitation and substantial sums coming from sponsorship and corporate sources. The latter sources can be fickle and ephemeral so the BBKA is engaged in investigating longer-term funding for research. This has to be balanced with the need to take due care and diligence with our financial resources so as to preserve, deliver and enhance existing member benefits. Delivering support to our membership has always been a key component for our charity. I encourage you all to participate in letting the BBKA Executive know of ways we can help and support, thus allowing you to derive even more understanding and enjoyment from the pleasures of beekeeping.

Thank you for being a member of the BBKA.

Martin Tovey, President, BBKA

Cover photos: Crocus with honey bee image Roger Cullum-Kenyon; right-hand panel: top, Angie Twydall; middle, Jeremy Early; bottom, David Wootton.

Contents

Regulars

President's Letter	3
In the Apiary	4
Beekeeping Notes for Beginners	6
Products From the Hive: Making Lip balm	8
Going Wild — Native and Non-native Plants	11
Solitary Bees	15
The Forager	18
Learning from Others: Solar Wax Extractors	19
On the Bookshelf: The Bees	22
DVD Review: Beekeeping for Beginners	24
Learning from Others: Queen Rearing	25
Business Corner	28
Classified Directory	29
Your Letters	30
Diary of Events	30

Features and Practical Advice

Keeping Bees 'in the Gap'	9
Why Don't We Just Let Bees Swarm?	13
So You Think Your Colony Is Queenless	16
Apiary And Hive Hygiene	21
Difficult Colonies	23
Beekeeping Modules: Fulfilling their Purpose?	26
ECJ Ruling on GM Pollen in Honey	27
Study Groups: One Way to Better Beekeeping	27

EDITORIAL

Editor: Mrs Sharon Blake, Stratton Court, Over Stratton, South Petherton, Somerset, TA13 5LQ. Tel: (01460) 242124

Deputy Editor: Dr Christine Knott, Tel: 07765 130203

Design: Roger Cullum-Kenyon

All editorial enquiries and submissions should be sent to the editor at: sharon.blake@bbka.org.uk

ADVERTISING

Lynn Pearce. Email: advertising@bbkanews.org
(Office hours: Mondays 9am–5pm)

PRINT AND DISTRIBUTION

BBKA News incorporating the British Bee Journal is published monthly for its members by BBKA, Reg. Charity No. 212025. Copyright 2011 BBKA.

Printed by: Avenue Print Management, 1 Blighs Road, Sevenoaks, Kent TN13 1DA. Tel: 01732 742397

Distributed by: First Move

CONTRIBUTORS

Regular contributors: Brian Ripley, Graham Royle, Sarah Holdsworth and Chris Deaves.

CIRCULATION 22,100

Please send any alterations for direct mailing, via your Association secretary, to the BBKA Members' Register.

OPERATIONS DIRECTOR/ GENERAL SECRETARY

Jane Moseley, National Beekeeping Centre, National Agricultural Centre, Stoneleigh, Kenilworth, Warwickshire, CV8 2LG.
Tel: (02476) 696679 Fax: (02476) 690682
Email: jane.moseley@bbka.org.uk
Website: www.bbka.org.uk

In the Apiary

Lengthening days and gradually increasing temperatures can only mean one thing for healthy bees: colony expansion. How are your bees faring? It is time to get down to the apiary and find out.

February can either be really cold and wet or we can have some early warmth. It is very variable and from our bees' point of view it can be a difficult month. The bees are expecting the weather to improve as the day length increases and the queen will have started to increase her laying rate. As the volume of larvae in the nest increases the workers need to expend more energy to preserve the nest temperature. More workers will be needed for this and they will use up the honey stores in the nest. The secondary effect will be that water vapour produced from the metabolism of honey will increase and can condense on the periphery of the nest. If this is allowed to become excessive it will encourage moulds to develop that could eventually kill bees and larvae.

Healthy bees are needed now

February is a very busy time inside the colony, and at the same time the foraging bees will need to be out collecting pollen and nectar to keep the colony well supplied. These are the workers

that hatched in the previous autumn; in bee terms they have already lived a long time and they will now be nearing the end of their useful lives. Healthy winter bees should be expected to provision and care for two brood cycles (at least six weeks of house bee work). If these bees are not healthy they will be

unable to complete their tasks before they die and the colony will have great difficulty in surviving through to spring. If you did not keep the number of varroa mites in the hive low in 2011 your bees may succumb to a virus infection, and if you did not ensure your bees were free of nosema they will be poorly nourished and the colony will have difficulty in building up as the warmer weather comes along.

Is there enough useable honey stored?

Colonies with plenty of honey stores can die of isolation starvation if the colony is not large and the stores are not near the centre of the brood nest. In cold weather the cluster cannot move far from the nest without threatening the survival of the brood and if the available stores are at the edge of the hive the cluster cannot cover the stores and brood at the same time. Colonies that die from starvation will have thousands of dead bees on the floor and hundreds with their bodies head first in the cells around the dead brood. Bees will have died eating the last drop of available food. Check that there is available food for the colony to prevent this from happening.

Examine your hives thoroughly

As ever, much can be learnt by watching the entrance to the hive on warm sunny days (most years there are a few of these in February). Colonies that are doing well will have many bees flying out to find fresh pollen and to defecate outside the hive. Activity outside weak hives is far less and may not reveal any workers collecting pollen. If you only have one hive it can be difficult to know if a hive is doing well or not. If the weather is warm enough, above 8°C and sunny without significant wind, it is worth lifting off the roof and peering into the hive through the hole in the crown board (make sure you are wearing a veil). A strong colony will soon have bees coming to the light to find out what is happening whereas a weak colony will seem strangely silent. Secondly, put your hand flat on the crown board. In a weak colony the crown board will feel cool whereas with a strong colony the crown board will feel quite warm above the area where the brood nest is located.

If your colony does seem weak, then feed it with candy and hope that it will survive. If it is dying because the bees are not healthy there is probably not much you can do. However, I am aware of an occasion a few years ago when a beekeeping friend explained that her bees were very weak in February and seemed to be fading away. She had not treated the colony with oxalic acid to reduce the number of mites so I suggested she could try this as a 'last ditch' rescue attempt. The colony immediately changed character and did well in the following summer. It just goes to show that winter use of oxalic acid can be beneficial even when not used at the recommended time. I think it worked because the colony was so weak at the time that there was virtually no brood in it and the varroa mites were mainly on the adult bees. Clearing them out gave the adult bees an opportunity to do their intended duties.

Winter preparations are important

Now is the time to prepare for the forthcoming spring. Make sure your spare equipment is clean and ready for use. Once spring comes and the bees become very active the colonies will expand rapidly and, without ready-to-hand equipment for swarm control

or clean supers to put on the hives you will find beekeeping a trial. Failure to prepare adequately can mean that you will spend too much time taking temporary measures rather than taking planned actions. In general terms you should have clean brood boxes full of new frames and foundation ready for your preferred method of comb change. February is a good time to plan the work for the year and decide how many queens will be replaced in your apiary, how many colonies you wish to have at

the end of the season and how you expect to manage varroa.



Bees with pollen. Photo by Dr Bee.



Super ready for use. Photo by Dr Bee.

Dr Bee



Spring 2012 Convention



Friday 20, Saturday 21, Sunday 22 April

The New Venue

Harper Adams University College, Newport, Shropshire TF10 8NB

LECTURE PROGRAMME

27 stimulating lectures spread over Friday and Saturday, for all levels of experience including:
Yves Le Conte – *Social organisation of the hive*; Robert Pickard – *The evolution of the honey bee*;
Debbie Delaney – *The importance of genetics*; Jochen Pflugfelder – *The biology of mating*;
Tom Salter – *Swarm Control*; Alan Bowman – *Gene knockdown*; Celia Davis – *Practical Beekeeping*;
Adrian Davis – *Diet and pollination*; Stuart Roberts – *Solitary Bees*; Juliet Osborne – *Pollination*
and many more – see programme and web-site for further details.

COURSES AND WORKSHOPS

From practical to the theoretical covering a wide-range of beekeeping aspects including:
Build Your Hive, Microscopy, Anatomy & Dissection Microscopy, Botany for Beekeepers;
Bumble Bee Conservation and Identification; Making Beekeeping Easier; Changing Combs;
Bee Space; Photomicrography; Honey Appreciation; General Husbandry; Advanced Husbandry;
How to Pass the Basic; Disease Recognition Soap Making; Queen Rearing and more,
all lead by experts in their field. See the programme or web-site.

New for 2012 – One day Food Hygiene Certificate course; Honey Beer Brewing

COURSE BOOKINGS

Please note: **Booking is required for most courses.**

Queen Rearing only: Diane Wakeling, 9 Tudor Avenue, Maidstone, Kent ME14 5HH
Tel: 01622 687938 • e-mail: dianewakeling@blueyonder.co.uk

All other courses: Workshop Convenor, Ruth Homer, 5 Malvers Cottages, Litton Cheney, Dorchester,
Dorset, DT2 9AE • Tel: 01308 482483 • e-mail: workshopconvenor@live.co.uk

FOR NON-BEEKEEPERS

Patchwork & Quilting Workshop; Cupcake Workshop; Creative Poetry;
Tours of the Harper Adams set-up; A visit to Shropshire Lavender.

Trade Show & Exhibition – 2500m² – All major traders present – Saturday only

On-site Accommodation, Camping and Catering

Contact June Hughes – june.hughesbees@hotmail.co.uk or 01256 464280

Tickets on sale 9 January: £14 members in advance, £16 after 31 March;
£20 non-members in advance, £22 after 31 March.

Non-members admitted only on Saturday 21 April. Buy through the web-site or by post,
sending your cheque, members names and numbers and a self addressed C5 envelope for return to:
Christine Hayward, 19 Kings Road, LEISTON, IP16 4DA - 01728 832487

General enquiries to Tim Lovett – tj1@dermapharm.co.uk



Beekeeping Notes for Beginners



Now is the riskiest time of year for your hives. If you carried out your winter preparations thoroughly back in September and October, now is 'exam time'. If you still have a cluster of bees in your hive and some sign of flying activity on warmer days, then you pass.

Do not be complacent; keep checking the weight of the hive and feed candy if needed. At this time of the year the colony needs to be prepared for a long, wet spring — the worst scenario for the colony at its most vulnerable. Keep monitoring varroa levels; this should now be very low but will soon increase at an alarming rate. Why? From mid-January, the colony has sensed the increase in day length, even though it remains cold. Egg-laying rates are starting to increase and the first new capped cells are starting to appear about now. By March, there will be large numbers of brood cells to support the mite increase.

What else is there to think about?

Although you are doubtless itching to get back into the bees, it is not yet warm enough. However, now is a good time to think about equipment and growth of the apiary. During the last year you have probably operated one or two colonies and the choice of hive that you used may not have been your own. It is worth thinking about this for a while before you get a shed-full of assorted odds and ends.

Hive types

There are many types of hive, but only two rules:

- ❑ **Stick to one type of hive throughout the apiary.** This means that all the equipment fits together when you need it! Many hive types are similar and can be adapted by a skilled woodworker to fit together well, but more often than not, the result is leaky hives and a lot of propolis. For 99% of beekeepers, keep to one type.
- ❑ **Get the hive size right.** If you do the sums you will find that between the smallest type of hive and the largest there is at least a factor of two in the number of cells that can be supported and hence the volume of the hive. If you put a queen in a hive chamber that she is not able to populate adequately, then firstly, the outer edges of the brood chamber will not be serviced by the housekeeping bees or kept sufficiently warm — this is an excellent way to get wax moth and chalk brood problems, together with bald brood incidence. Secondly, there will not be enough bees to fill and cap supers — you will get a lot of half-full frames later in the season.



Power food for your most industrious employees.

Your bees will enjoy excellent food with ambrosia®. Because ambrosia® is a sucrose-based compound food which can not only withstand micro-biological spoilage but also has a long shelf life. And since it is odourless, robbers pose absolutely no threat to it at all.

ambrosia® Beefood Syrup



12,5 kg

870/1360 kg

ambrosia® Beefood Dough



15 kg

5 x 2,5 kg

Download your feeding guide and find your local retailer on:

www.Aulumgaard.com

ambrosia®
Beefood at its best!

If you found yourself with a very full brood chamber last year (a sure sign of this is a significant arched gap in the super above the excluder, where the bees are anticipating adding more brood, not stores) then you could think about moving to a larger hive system or use a 'double brood box' method.

Other equipment

Now that you have had your bees for a year, you have an idea of the other equipment needed to support a colony. This year, you may well increase the number of colonies, so will need more equipment — this can multiply into big money. Remember:

- ❑ you need equipment to deal with swarms and swarm calls
- ❑ you need one more floor than hives to start 'spring cleaning'
- ❑ if you are going to use a 'transfer to clean comb' technique, you need one extra brood box per colony
- ❑ you will need at least three supers per hive, possibly more
- ❑ you will need excluders, crown boards, stands, roof and entrance blocks, nucleus boxes etc for swarm management.

Now is a good time to ask yourself: 'how many colonies do I want to keep and what will I do with the honey?'

“ February augers longer and warmer days and you should keep checking the weight of your hives and monitoring varroa levels. Also, think ahead now before the colony expands beyond your control. Consider how many colonies you would like to have and how many you are able to manage. Decide what sort of hive you wish to use, then stick to one type and make sure you use a size that will be filled optimally by brood. Do a 'stock check' on your equipment both in terms of quantity and condition and ensure you have adequate supplies for the season. ”

For those of you using 'horizontal' hive systems, such as the Beehaus or Dartington, you will have found that you have a degree of swarm control possibility within the structure, but that the management approach proceeds in 'twos' and the need for support equipment is quite different. Ask yourself: 'can I cope with two or more of these or should I stick with one?' As an aside, there are 'conventional' hive types that take the same frame size as these hive types.

With top bar hives, firstly, the health of your bees and of the hives belonging to other beekeepers in the area is paramount. If you cannot manage disease with your chosen hive type then you are not helping bees 'in the large'. Secondly, the methods of extraction of honey are different for top bar hives as the frames cannot be spun in an extractor, but this may not be a problem as there are other means of extraction. However, the most significant consideration is the system of beekeeping. Many types of hives are associated with particular 'philosophies' of beekeeping, some of which pre-date (or ignore) the step-change in management necessitated by the arrival of varroa. This is largely a matter of history, not specific technology.

So I will leave you with this thought: It is perfectly possible to be an appalling beekeeper with any type of beekeeping equipment and approach, and it is equally possible to be an excellent and responsible beekeeper with identical equipment and approach. What matters is your mental view of your bees and bees in the large. After a year of beekeeping, what is yours?

Chris Deaves, Chairman of Education and Husbandry

MAISEMORE APIARIES LTD

PROFESSIONAL BEEKEEPERS, MANUFACTURERS
& SUPPLIERS OF ALL BEEKEEPING EQUIPMENT



Hives, Starter Kits & Accessories
Beekeeping Suits & Veils • Medicines
Beekeeping Books and much more...

, , , & , &
081 144 : 8 4 2: 7 . @144 : 8 4 2: 7

STEALTH TRAIL CAMERAS

PROTECT YOUR OUTDOOR EQUIPMENT
WITH OUR STEALTHY TRAIL CAMERAS



3+ Month Battery Life, Weatherproof, Video &
Photo, Time Lapse, Motion Record, Time & Date
Stamp, Records Night and Day, & Even Remote
Access via GSM Network

VISIT: WWW.TRAIL-CAMERA.CO.UK
CALL: 01933 382674

Hive Products: Beeswax

What shall I do with all this beeswax?

Have you ever wondered what to do with your beeswax? I did too ... so I started doing some research. Beeswax from your own hive is worth its weight in gold. Bees fly some 150,000 miles to produce 1 lb (454g) of wax. For every 100lbs of honey present in a hive, a beekeeper harvests only 1–2 lbs of wax. If like me you have gathered beeswax from your hives, made candles or wax blocks and are now looking for another use, then why not try making lip balms, hand creams or lotions?

The skin is the body's largest organ. We eliminate toxins though it and it produces vitamin D after exposure to sunlight. It makes sense to be careful what we put onto our skin so it does not stop these processes. Many commercial skincare products contain petrochemicals, which can block the skin's pores causing dryness and irritation. When you start to make your own products you know exactly what is going into them.

So, why not try making your own lip balms using your own beeswax?

Here is the easiest of three recipes that I shall be sharing with you over the next few months — it is pretty fool-proof! Put your apron on, ignore the doorbell and phone calls, turn off the computer and be creatively inspired! You do not need any specialist equipment — just a saucepan, a bowl and a cooker.

The lip balms are made up of various waxes, including beeswax, sweet almond oil and essential oil of your choice (I have found peppermint or lemon to be my favourites). All these other ingredients are readily available on-line — stockists listed below.

IMPORTANT: *Children should be supervised and care must be taken with hot wax.*

Suppliers

www.lime-tree-trading.co.uk — one of our websites where you can read how a hobby turned into a small business. We supply shea butter, cocoa butter and sweet almond oil. Full details of natural product workshops for 2012.

www.amphora-retail.com — for essential oils.

Angie Twydall

Angie Twydall is a practising Holistic Therapist see www.yoganature.co.uk as well as a beekeeper, yoga teacher and work-shop facilitator.

For events, classes and courses in East Kent go to www.lime-tree-trading.co.uk.

Lip Balm Recipe

You need:

- 4g beeswax (in small pieces)
- 4g cocoa butter
- 6g shea butter
- 10ml sweet almond oil
- 10 drops of essential oil
- Labels, if you want to personalise your lip balms
- A small saucepan
- A glass bowl that sits on top of the saucepan
- 4 small glass lip balm jars

Instructions

1. Place the sweet almond oil, the beeswax and the butters together in the glass bowl.
2. Half fill a small saucepan with water and heat it on the hob.
3. Place the glass bowl on top of the saucepan, checking the water does not boil over. Let the oils, wax and butters melt slowly. An occasional stir with a wooden spatula helps. You will find the beeswax takes a lot longer to melt so you can break it up into small pieces before adding.
4. Remove from heat, using oven gloves and carefully transfer to the lip balm jars. Remember the liquid is very hot. If you want to use a jug at this point, make sure it has been heated to keep the mixture molten.
5. The mixture will set quickly, so immediately start to stir in the essential oils using a cocktail stick. One drop per small jar is enough to add scent and flavour.
6. Stir occasionally while cooling to ensure the essential oils are mixed in thoroughly.
7. Use labels to personalise your lip balms if you are giving them away as gifts.
8. Then apply liberally to avoid wind-chapped, sore lips.



*An assortment of lip balms made using beeswax.
Photo by Angie Twydall.*

Keeping Bees As Best We Can With What We Know

Keeping bees in the 'gap'

For most of the past twenty-seven years US beekeepers have been keeping their bees in the interstice formed between mites not being on our bees and mites being on our bees. We know the question: 'How do we effectively control mites?' but we do not yet have the final answer.

In what will soon be three decades in the US we have tried a plethora of remedies. None have positively risen to the top of the 'control procedures' pile. Though it has been the goal of scientists worldwide, nothing has been found that will let us routinely keep bees as we did in the '70s. Frequently, today's bees seem lethargic and weak. Replacement queens are not great. Why? I do not know. This is bee life in the 'gap'. It is disconcerting.

A frustrated beekeeper

As I spoke to a beekeeper on the phone he was upbeat and energetic, but was clearly frustrated. He had several hundred hives going into winter of 2010–2011 that were strong and heavy. By late January, half were dead. The fate of the living was uncertain. Sure, he had had winter losses in the past, but not this many and not this early in the winter. Through the years, I have heard many variations on this theme, but this guy seemed to know his bee management science. In just about a decade, he had gone from two colonies to more than four hundred.

His description sounded like so many others. In many instances, only a few dead bees were still present; not like the old fashioned starved colony of miteless years past where entire dead clusters remained within the hive. Sometimes honey was there and sometimes the colony was already surprisingly light in stores. Nosema? CCD? Old combs? Nectar from GM plant sources? What was causing this high winter mortality and what could he do to stop the remainder of his colonies from dying? In answer to his own questions, he abruptly said, 'But if you knew the answers, you would be very popular and very wealthy!' Was he ever right on that score!

Another frustrated beekeeper — me

During the second week in January, snow had fallen and was crunching beneath my feet as I returned from my storage barn. It was a bright day so it was easy to see the little black spot on the brilliantly white snow. It was a dead bee that I duly noted. 'Humph.' A few more crunching steps and there was yet another black spot. In fact, there were dead and dying bees everywhere. What was going on? My three bee hives were near the storage barn. They were from packages in the spring and had built up nicely. I had given them full frames of capped honey. I had provided fully drawn combs on which they could initiate a brood nest. They had easily accepted the

new queens without signs of supersedure. They had exhibited good flight all spring and summer. Now, this? Where were all these dead bees coming from?

In fact, they were coming from the middle hive of my three hives. It was 28°F (-2.2°C) outside on a bright, still day. Yet the hive was alive with frantic bees at all entrances and a small pile of dead bees accumulating on the ground. They appeared frenzied; as though they were all trying to leave at once. They seemed positively eager to die. As I stood there, watching in confused amazement, a few bees departed on suicide flights. What was happening? As before, I considered the usual suspects — Nosema? CCD? Old combs? Nectar from GM plant sources? Blah, blah, blah. I simply do not know what was occurring in this instance.

Some thoughts on unexplained die-offs

Reusing old combs

The frustrated beekeeper, who I referred to earlier, questioned his reuse of old combs to establish replacement colonies. Reusing drawn combs is a common procedure in beekeeping throughout the US. Most beekeepers remove the occasional damaged old combs as they manipulate their colonies. The potential problem with this procedure is a low-key subject that is periodically brought up by various scientists and beekeepers. Beeswax is a chemical blotter. It seems that any lipid soluble chemical that comes near it is partially absorbed by this wax. It has been postulated that, at some point, harmful levels of residues are reached that negatively affect developing brood. Apparently, some of these chemicals can even be synergistic; yet, testing combs for chemical residues is impractical for nearly all of us. How long to use combs, when to replace combs, and how to replace combs are some of the common unanswered questions in this area. This is one of those partially answered questions in beekeeping. We know that chemicals accumulate in our combs, but we do not know when combs have accumulated enough to preclude continued use.

This is an issue that causes concern among 'gap' beekeepers. The beekeeper in question kept records comparing longevity of packages initiated on combs with that of colonies begun on foundation. In his operation, he could see no difference, so he will continue to use recycled combs. His episode was not an example of analytical science. These conclusions do not speak to all of us, but in his case, they speak to him. For the present, he will not destroy old combs. He is trying to develop answers of his own when other, more formal, answers are not available.

Package bee costs and availability

My frustrated caller flatly stated that it was presently worth the money for him to replace dead-outs (i.e. winter killed colonies) with early spring packages. Last season, his package bees built up in time to produce tons



Figure 1. All seemed quiet, but the middle hive had serious problems. Photo by Dr James Tew.

of honey. He installed packages during cool weather in March; something he had never done before. He has made some interesting observations. Installing packages during cold weather restricts excessive bee flight. Honestly, when multiple packages are installed at the same time and installed near to each other, I do not know what truly happens to all those randomly flying bees that fill the sky. I would like to think that they all find a hive somewhere but I know that some (even many) are lost forever. Installing packages on warm days gives the bees a chance to take cleansing flights and to position themselves on combs, but they do tend to drift toward the end colonies in the apiary. No big deal; later in the summer the beekeeper can equalise the colonies and all is back on course. But installing earlier (and colder) would eliminate a colony equalisation procedure and would get the bees on the job earlier.

As we talked, and as I have done with others, we lamented that winter kill percentages are significantly higher than twenty to thirty years ago. In years past less than ten percent would perish during the winter. Now, a 40–50% die-off is not unheard of and the surviving colonies are often weak. It seems inconceivable, but possible, that on a future early spring day, a beekeeper could find that all colonies in an apiary have died. 'Well, we would just have to buy more packages'. How will the package producers keep their bees alive if ours are all dying in significant numbers? Their bees are not different from ours. Then what will happen to our bee enterprise? These questions just loomed in our conversation with no obvious answers. This discussion was nothing more than a friendly 'pity-party' between two chatty beekeepers. Neither of us was predicting that such total winter loss events would come to pass. But later, after we had chuckled about this potentially dire event, I was left with a threatened feeling.

Too many colonies die during winter months

If we agree that we have plenty of questions and not enough answers, what are we to do here in the 'gap'? Like New Year's resolutions, each winter/early spring, I make a list of things I will do differently in the upcoming season.

For overwintering, I now leave even more winter honey stores. That is a change from seasons past when I took more honey as surplus. Now, I commonly leave enough honey on colonies for the splits/packages that I install the following spring. But for the past six years or so, some of the most unexpected colonies have died, and on occasion, some of the weakest colonies have survived. Clearly, inadequate honey stores are not the only problem. Am I just mis-remembering? Decades ago, did populous colonies sometimes die and weakened colonies occasionally survive? Have I just forgotten? Even so, I want to discuss this abnormal winter flight that for several past winters, some of my colonies have exhibited. If the effects of nosema are not the only problem, I suspect that it may be a significant part of the problem. Nosema has probably been some part of my bees' challenges essentially every winter season for many years.

Fumidil-B tends to be hard to feed

Here is the hard truth. I have always found the process of feeding Fumidil-B to be a hit or miss procedure. Some colonies take the medicated syrup while others either ignore it or cannot figure out

how to make the feeder work. The fumagillin powder clumps and the product is expensive. Time and again, I threaten to feed it to my colonies during autumn or spring; but invariably, it simply does not happen. Now officially, nosema treatments are high on my 'to-do' list.

Somewhere in Maryland, many years ago, I visited a beekeeper who was feeding medicated sugar syrup in large, plastic 'Ziplock®' bags into which he had cut clean slits with a sharp knife. I was certain that the syrup would leak out. It did not. That idea is now being used by some to supply Fumidil-B medicated syrup in spring or autumn. Individuals using this procedure do not have to store feeders or deal with the problems of mold growth. While listening to the frustrated beekeeper explain the unfolding mystery, my memory drifted back to some of my earliest academic years in beekeeping. I was at the University of Maryland and had wintering colonies fecal spotting the whole area. Using a hemocytometer, I counted nosema spores to determine if the university bees were suffering from nosema. At the time, Dr Basil Furgala, University of Minnesota, was actively promoting nosema as the unseen illness of the bee world. Though I really cannot remember, I feel certain that some level of *Nosema apis* was present then and that it is still very much present today.



Figure 2. Dead bees from last spring's packages. Photo by Dr James Tew.

Now, here I am, 37 years later, wondering if I should be looking at nosema once again for being the current bane of my bee colonies. This time, I will be expecting

to see *Nosema ceranae* rather than *Nosema apis* but the treatment will be the same — Fumidil-B. Clearly, 'gap beekeeping' is not restricted to mite problems. We have actually been keeping bees in the 'gap' in regards of issues such as: nosema, American foul brood, chalk brood and now small hive beetles (SHB). I remember the conversation with the frustrated beekeeper with fresh realisation that many of these issues are like old, familiar enemies. While we have not defeated a single bee enemy, we and our bees are still here.

Time and again, our bee industry has been hurt, but after a while it rises to fight again. Whatever is killing my frustrated friend's bees certainly concerns him and many other beekeepers with similar fears. Creative beekeepers will continue to find ways to keep their bees as healthy as possible with what is known right now — in the 'gap'.

Dr James E Tew
State Specialist, Beekeeping
The Alabama Cooperative Extension System
Auburn University
Tewbee2@gmail.com,
<http://www.onetew.com>,

References

1. General overview of Nosema: Tom Webster. *Nosema ceranae The Inside Story* http://www.extension.org/pages/Nosema_ceranae_The_Inside_Story.
2. Colony Collapse Disorder (CCD) Overview. <http://www.pnas.org/content/106/35/14790.short>.
3. Genetically Modified Foods and Organisms (Overview). http://www.ornl.gov/sci/techresources/Human_Genome/elsi/gmfood.shtml.

Going Wild — Native and Non-native Plants

We have many native solitary and bumblebees, which have evolved to forage on native wildflowers, such as red clover *Trifolium pratense*, viper's bugloss *Echium vulgare*, foxglove *Digitalis* spp. Due to loss of wild habitat, several bumblebees, such as *Bombus subterraneus*, have been pushed to the brink of extinction though effort is underway to reintroduce them from Sweden after attempts failed with the New Zealand introductions. It could be said that native wildflowers are essential for native bumblebees and other native insects.

Domesticated honey bees, on the other hand, are no longer purely native. The introductions of queens from Italy had already begun in the mid 1800s, thankfully, because in 1910–15 'Isle of Wight' disease swept through the UK and virtually eradicated our native *Apis mellifera mellifera*. Brother Columban who had bred a cross between *Apis m.m* and the Italian *Apis m. ligustica* at Buckfast Abbey observed that these cross-breeds were the only surviving bees, resistant to the disease. So over the next few years he and Brother Adam devoted their efforts to breeding and despatching hundreds of colonies to all parts of the country. We have a lot to thank them for. And since then, to avoid inbreeding which weakens bees' resilience, queens have been introduced from Holland and

France. In fact domesticated honey bees all over the world are now pretty much homogenous.



Agastache and Solidago. Photo by Sarah Holdsworth.

In 1831 a very interesting experiment took place. The first settlers emigrated to New Zealand, taking a wide selection of fruit trees and vegetable seed to stock productive gardens, and, because there was no such thing as a honey bee in the Antipodes, some bright spark decided to take a few hives of bees, which were carefully packed in wine barrels with ice to keep them cool on the long journey. Letters on record note the English pioneers had no real idea whether this introduction of honey bees would work or fail.

The rest is history, though I like to muse on how the bees must have felt when they emerged into their new world, turning their old one literally upside down. One sunny day, I guess it went something like this, a bright-eyed and hungry honey bee must have stumbled into a heady, sweet-smelling, inflorescence cloud within which she found nectar like no other nectar had ever tasted. At this very moment, she had made one of the most important bee discoveries in the whole history of 'bee moments'. I like to imagine this clever worker bee floating euphorically back in the hive, and doing the historic waggle dance with a giddy flourish to signify the

Education

Two more flowers for your training collection...



The Red or Improvers Course - the third of our training products, is aimed at BKAs to help tutors impart greater skills and competences to improving beekeepers aiming at modules 1 and 2 and General Husbandry.



The Green or Proficient Course - the fourth of our training products, is aimed at BKAs to help tutors impart further beekeeping skills, from recognising and dealing with honey bee pests and diseases to those wishing to study for further modules.

Both Red and Green Course in a Case® products are now available at the subsidised price of **£50.00** to BBKA Associations.

To order your CiC cases - email Julie Slegg at NBC for an application form - support@britishbeekeepers.com

Please Note: Deliveries by courier are subject to a charge. Course cases may be collected by prior arrangement from NBC.



For further information on how to order your BBKA 'Course in a Case' - email support@britishbeekeepers.com or call the NBC on **02476 696679**

The ZEST Hive Concept by Bill Summers

ZEST: Zero Energy and Sus-Tainable

ZEST is a DIY hive that is natural, sustainable and comes at a third of the cost of conventional hives!

As a registered architect and a beekeeper for 40 years the author of *The Zest Hive* is well placed to see that the design of wood hives, unchanged for 160 years, needed addressing, being prone to cold and damp conditions that cause and exacerbate disease.

With his knowledge of designing the built environment and of the modern materials available, he set about redesigning the bee hive from first principles. His ambition was to increase the health of bees and to drastically reduce the cost of keeping them by employing the principles of sustainability. Very little of the old wood hives remained after these design objectives had been researched and tested over 3 years.

Other topics the author deals with include the 'Waggle Tail Dance' and breeding the 'Hygienic Bee'. It is not a book for the timid or faint hearted. Those with belief in tradition or high blood pressure better look away now. This is a book for the experienced beekeepers grown weary of their bees dying of disease and of the cost of keeping them. It is amenable to 'letalone' beekeeping. It is also a book for the beginner who does not wish to spend a lot of money on buying last century's flawed hive designs.

To purchase this invaluable book contact enquiries@zest-hive.com Electronic copies are £2.50 and paper versions are £10 + p&p.



treat in store for the other bees. And for the first time in New Zealand history, one of their hitherto unremarkable native plants suddenly became melliferous. We are of course talking about Manuka *Leptospermum scoparium*, the small tree with remarkable antifungal properties, which flowers in the UK from May to July. Clearly the bees do not mind where a plant evolved, or even if they have never seen it before. The only things that matter to them are:

- Is the plant in flower?
- Does the flower have tasty nectar, and/or pollen?
- Is the nectar within reach?
- Is there enough nectar, or pollen, in the drift to feed the hive?

Only by watching the bees can we tell which native or non-native plants in our garden will tick the boxes. One important point is that a plant must be hardy enough to flower in our climate (which will also mean we can save the seed to garden sustainably).

More non-natives loved by honey bees and other bees

Anise *Hyssop Agastache foeniculum* (wild species) the North American perennial herb said to support one hundred hives on one acre is a boon for building up bees' winter fat and protein reserves. Sow seed in early spring or plant plugs any time. Pinch out growing leaf-tips in May/June (the leaves make a delicious tea) and you will have multiple-flowering plants from July to November.

Japanese Quince, *Chaenomeles japonica*, is a shrub which produces deep orange flowers from February, providing vital early pollen and nectar. It flowers best if spur-pruned and trained as fans against walls, though works well as hedging or ground-cover, and later on produces edible fruit ideal for jam-making.

Borage, *Borago officinalis*, a major source of pollen and nectar from June to October, deserving a massive patch; it self-seeds and thrives in poor soil.



Sarah Holdsworth,
sarahs.beegarden@btinternet.com

February in the garden

- Prepare seed beds and lime vegetable patch (after pH testing) if necessary.
- Organic fertilizer — horse or chicken manure, seaweed or well-rotted compost — applied around plants or on the vegetable patch now will ensure the nutrients are ready to be absorbed by spring.
- Plant bare-rooted fruit trees or bushes, such as raspberry, blackcurrant, cherry, plum or greengage.
- Prepare surplus lawns for sowing new seed. Next month I will explore how to create a mini wildflower meadow from tired old lawn.

Check:

Water supply, but no drowning places. You could install a pond, fountain, or automatic bird-bath, and place netting and ropes draped into the water to provide bee 'climbing-out' places.

Wind shelter — bees do not like foraging in windy sites, plant hedges strategically.

Sunny borders — sun-loving plants flower more prolifically in full sun.



Bee Hive Supplies

Specialists in British National Polystyrene Hives

Complete Polystyrene Hive Kit

Including: Insulated roof, open mesh floor, choice of brood box, supers, frames and foundation, queen excluder and a hive strap.

From £149 inc VAT and delivery





Beginners Kits

Including: complete hive (above) with choice of brood box, high quality cotton one piece coverall with astronaut hood, gloves and wrist gauntlets, feeder, large stainless steel smoker and J tool and "A Practical Manual of Beekeeping".

From £270 inc VAT and delivery

We also supply a range of beekeeping equipment including smokers, hive tools, beekeeping suits and gloves, extractors, queen rearing equipment and much more.

www.beehivesupplies.co.uk

email: sales@beehivesupplies.co.uk Tel: 07799031898

Beekeeper's Protective Clothing

est 1968

The "Original"



Coming Soon ...

Sherriff's New Web Site

Be the First to snap up the Limited Special Offers!

www.beesuits.com

newsletter@bjsherriff.com



www.bjsherriff.co.uk

sales@bjsherriff.com

www.beegifts.com

tel 01872 863304

Why Don't We Just Let the Bees Swarm?

Why not indeed? After all it is the natural thing for them to do. The very first reason for not doing this that I ever heard was the somewhat glib 'because we are beekeepers not bee-let-em-all-fly-away-ers'. Swarming is certainly an essential aspect of the life of honey bees; a phenomenon noted and written about by Homer, expanded on by Pliny and included in every bee book written ever since. Not everyone got it right and the texts are peppered with accounts of myth and rumour. Does anyone these days beat a large pan with a heavy spoon to claim ownership of a swarm they are pursuing? Is there some dark deep valley where the first cast is still called a colt and the next a filly?

There are three occasions when the colony will replace its queen without human intervention:

❑ In an emergency

In the event of the sudden and unexpected loss of the queen, the colony will quickly move to build one or more queen cells to rear a successor.

❑ By superseding

I have heard superseding described by beekeepers as a much more desirable trait in their bees. In fact all the bees have done is to replace an old and failing or injured queen. But in any event what is important is that the 'colony', which has been described as immortal, survives. If, in its evolution, the honey bee

had gone along the path of only superseding queens then at some point the creature would have failed. Lost colonies would not have been replaced and the honey bee would have dwindled away into extinction.

It has even been suggested, I suspect due to a bit of anthropomorphism, that the eggs from an old and failing queen would not provide a good basis for a strong new queen. The effect of age on humans is not reflected in bees.

While bees have obviously always swarmed, I suppose we might be allowed to wonder if old beekeeping practices did anything to change the bee which we have now. Did the many years of keeping bees in skeps and, in order to harvest the honey, the practice of killing off those colonies that had not swarmed but might have superseded, leave us with a 'swarmier' bee?

❑ By swarming

And now we come to the nub of the matter. Complete book chapters and even whole books are dedicated to the subject. They explain in minute detail a wide range of procedures to

follow in order to delay or eradicate the event. For those who find the need to practice some form of swarm prevention there are many methods, and variations on methods, available. If the prevention of an instinctive process is to be carried out successfully then the most sensible way seems to me to be one that keeps the gathering force together and convinces the bees that they have swarmed.

Swarm control

Probably the first and apparently simplest method, though possibly the worst a beginner comes across, is the destruction of queen cells. It is the worst for a number of reasons. It is too easy to miss a queen cell tucked away in a corner. It demands regular visits, usually seven days apart, to repeat the exercise. This repeated destruction causes stress to the bees and in any case the mathematics are wrong. Eventually the frustrated bees will choose an older larva to develop into a queen and swarm ahead of the next visit.

Some other methods, include the use of 'designer' boards which either divide the colony or interrupt the gathering of nectar and honey production. Many have the names of the authors or designers attached to them, a veritable who's who of the Edwardian beekeeping world. The timing of some manipulations can have a knock-on effect. Eggs laid

between, generally the 20 June and 10 July, hatch out to become the work force on the heather moors. Those dates were given by Brother Adam and I suppose relate to Dartmoor. In the North East of England one author extended the later date to 20 July thus giving the last bee to emerge two weeks of foraging. To that list I am going to add the following method practiced by a Durham beekeeper who keeps two of his hives on scales and can verify the continued income of nectar and production of honey throughout the process. This, at a time when major disturbance and splitting of colonies would normally reduce it.

Swarm control without weight loss

To carry out this method the beekeeper will need a brood box and a specially modified crown board along with ten frames of foundation or drawn comb. The crown board has a four inch diameter hole cut in the centre covered with fly mesh. An entrance is made at one side of the board. The advantage of the four inch diameter hole in the crown board is to allow heat from the parent colony to rise up and aid rapid build up.



Photograph of a swarm by Paul Herbert, Shropshire BKA.

When signs of swarming are seen in the parent colony the queen must be found and temporarily caged. Find a suitable frame with one or two unsealed queen cells, two frames of sealed brood and one frame of stores. These four frames, all with the adhering bees, are placed in the new brood box ready to be put above the modified crown board. The original brood box needs to be checked and all other queen cells destroyed.

The frames taken from the brood box are replaced by four frames of foundation. The old queen is released back into the parent colony, a queen excluder placed on top of the brood box and supers added. The modified crown board is placed on top of the supers with the entrance at 90° to that of the parent colony. The brood box with the queen cells, sealed brood and stores, to which six frames of foundation or drawn comb have been added, is placed on the crown board. A quilt and roof are added and the whole left for three weeks.

Heat from the parent colony will help the new queen to build up rapidly. The heat together with the rising scent results in a smaller loss of bees returning to the parent colony than might be expected. The mesh will eventually be filled with propolis, but not until after it has served its purpose. After five weeks the old queen can be removed and both brood boxes can be united resulting in a strong colony which can be taken to the heather. This swarm control method has been carried out on a platform scale thus measuring the daily weight gain or loss when the weather is poor, in winter and in summer.

The arrival of varroa heralded the end of those halcyon days of leave-alone beekeeping; a time when it was only necessary to take the roof off a hive twice a year. In the spring, to see if the bees flying in and out were living there or just robbing it and again in the summer to take off some honey. Those beekeepers got lots of honey because in the early summer their hives were not being continually interfered with in the name of swarm prevention. Yes, their bees swarmed but the use of prepared and suitably placed bait hives probably meant they collected most of their swarms so losses could be replaced.

Changes in varroa control and hive 'cleaning methods' have become easier. As the name implies, the shook swarm method controls varroa, and used at the right time can satisfy the colony's instinctive urge to swarm but do read the instructions. The use of oxalic acid is less disturbing than the Bayvarol strips of the 1990s. But the question I am set is: should we be using them at all? Perhaps the answer is to be found by looking at the location of the bees themselves.

How pleasant to sit on a summer's day with the humming of the bees and watch a clouded swarm pass over ... on its way to terrify the wits out of some unsuspecting soul. We owe it to the public and indeed to ourselves and other beekeepers to be responsible beekeepers. Be honest, a loose swarm of bees in an urban area is a nuisance. It brings mayhem to a street and can bring the centre of a small town to a halt and the press love it! Yes the urban beekeeper should make every effort to prevent their bees from swarming. At the same time beekeepers should be prepared to 'be the hero' in the eyes of an admiring public and collect swarms from positions where it is safe and practical to do so. I think we all accept that swarms do get into locations where the only option is to call in the pest control officer. I have known

pest control officers who became beekeepers having been called out to destroy wasps which turned out to be honey bees and, rather than kill them, have boxed them up taken them home and acquired a new hobby.

“Swarming is an essential aspect of the life of honey bees. This is one important way a colony can replace its queen and it may be necessary, for example, if the queen is lost or to replace an old or failing queen.”

There was a time, albeit twenty years ago, when swarms were collected without fear. Any varroa were on the bees and could easily be dealt with. The fear came from the swarm that was not collected but vanished into the depths of a

hollow tree from where varroa could re-infest hives. Modern thinking is rightly more cautious with the findings that swarms can carry AFB and EFB. The advice is that collected swarms should be quarantined until their health is verified.

A swarm emerging unchecked from the truly rural out-apiary may not cause the same amount of public disturbance, but the beekeeper's work is not over. Somewhere there is a fairy tale world in which the bees either only make one queen cell or, if more are used, the first queen to emerge will rush around killing all her unhatched sisters.

There is a beekeeping choice. Option one. The beekeeper can either put work into controlling swarming. Or, option two, having allowed a swarm, immediately put the effort into carefully searching the swarmed hive and reducing excess queen cells making sure that the colony does not 'cast' itself into extinction.

You can please yourselves. I vote for option one.

Ian Copinger, Durham BKA

BBwear
Specialist manufacturer of beekeepers' clothing
Established 2000 Made in the UK

RR1 Retro Full Suit BB501 Basic Full Suit RR501 Retro Basic Suit

- BOTH TYPES OF HOODS ARE INTERCHANGEABLE
- FREE LEATHER GLOVES WITH BB1/RR1/BB2/RR2
- MADE TO MEASURE SERVICE AT NO EXTRA COST

SEND FOR FREE CATALOGUE
Prices apply to all sizes and include VAT and Postage (UK only)

1 Glyn Way, Threemilestone, Truro, Cornwall TR3 6DT
Tel/Fax: 01872 273693
email: mike.bb1@btinternet.com www.bbwear.co.uk

Solitary Bees

Beekeepers know a lot about honey bees but it appears that very few are even aware that there are other bees, apart from bumblebees. When giving a talk last summer on solitary bees to an audience of over a hundred beekeepers I asked at the start how many had heard of solitary bees; the answer was only about 10%. But, there is now an increasing public awareness of other bees because of their importance for pollinating crops.

So what are solitary bees? They are non-social bees, unlike honey bees and bumblebees, and they therefore are only males and females, with no queens or workers. A female solitary bee builds her own nest and provisions it with food (pollen and nectar) for her offspring without any help from other bees; she normally dies or leaves her nest before her offspring have matured. In Britain there are about 215 different species of solitary bees but only 24

cleptoparasites, commonly known as cuckoo-bees. Most species collect pollen on their hind legs like honey bees, but many have pollen-collecting hairs on the underside of their abdomen and a few swallow the pollen, store it in their crops and then regurgitate it in the nest. Many species forage for pollen from a variety of flowers (polylectic species) like honey bees, some collect it only from a few closely related flowers (oligolectic species) and a few collect it from only one species of flower (monoleptic species). Honey bees, because they are colonial, fly from early spring to late autumn, but adult solitary bees normally live for only about one month so different species fly at different times depending on the flowering period of their main forage plant. In early spring many species of mining bees emerge to take advantage of the fallow blossom while in late summer others emerge to collect heather pollen, and the Ivy Bee emerges as late as October when the ivy is in full flower.

I have been asked to write a bi-monthly article on solitary bees and I shall be describing the different genera of these bees over the coming year. Interested members may want to find out more about them now on the website of the Bees, Wasps and Ants Recording Society (BWARS) at www.bwars.com.

David Baldock,

Author of *Bees of Surrey* and *Wasps of Surrey* and until recently the treasurer of BWARS



Male Wool Carder Bee (*Anthidium manicatum*), a large and colourful solitary bee. Photo by Jeremy Early.

species of bumblebees and just the one species of honey bee. Worldwide there are about 18,000 species of solitary bees but only about 500 species of social bees, including seven species of *Apis*.

Among these species of British solitary bee there is enormous diversity in appearance, habits, flight periods and flower and habitat preferences. In size, they range from the Violet Carpenter Bee that is larger than a queen bumblebee to the tiny black mining-bee *Lasioglossum minutissimum* that is only 4–5mm long. Many species are plain black but some have brightly coloured hairs and others have red or yellow markings on their face or bodies; a few have black-and-yellow striped bodies, mimicking wasps. Most, especially the mining bees, excavate their nests in the ground but many others are cavity-nesters, constructing their nests in hollow stems or in old beetle burrows in dead-wood. Quite a number do not make nests at all but lay their eggs in the nests of other bees; these are

Cymdeithas Gwenynwyr Cymru Welsh Beekeepers' Association 2012 Convention

8.45am Saturday 24th March

Tea & Coffee available from 8.15am.

Hafod A Hendre Hall

Royal Welsh Agricultural Showground, Builth Wells, LD2 3SY.

Mynediad/Admission: Oedolion/Adults £8.00, Advance Payment £6.00

Ieuenctid/Juniors (Under 17) free/am dimm.

Cash only at the door on the day of the Convention.

Guest Speakers:

Dr Giles Budge

Research Co-ordinator FERA

"Random Apiary Survey"

John Hendrie

"Bee Communications"

Toby Beavan, John Thompson & Ianto Hammonds

**"Representing Wales at the International Meeting
of Young Beekeepers"**

Graham Royle NDB

"If Heath Robinson had been a Beekeeper"

Again in 2012

"Beekeepers Question Time"

A team of three experts welcomes questions from beginners and more experienced beekeepers.

A chance to ask the question you have always wanted to ask.

**Trade Stands and exhibitions, bargain beekeeping supplies.
All day refreshments. Free Parking.**

Advance booking before 3rd March

(by SAE and cheque payable to WBKA quoting ref C12) from
Barbara Chick, 11 Porthcawl Road, Caerau, Ely Cardiff, CF5 5HU

So You Think Your Colony is Queenless

A common anxiety for new beekeepers, especially if they only have one hive, is that their precious colony has become queenless. There are several ways colonies can become queenless. Queen bees can simply die of old age but this is a rare event as colonies (and beekeepers) usually replace aging and fading queens long before that. If a queen dies during autumn or winter this can be a problem as there will be few, if any, young larvae available to



Dead queen surrounded by worker bees. All photos by Gerry Collins.

convert into emergency queens and even fewer drones around for a virgin queen to mate with. With no queen or an unmated drone-laying queen present the colony will fade and die out or be equally doomed by the development of laying workers.

Queens can die from infectious disease e.g. adult queens can die from nosema and pre-emergent queens can die after infection from the black queen cell virus. However, the main cause of death of a queen in a managed colony can usually be attributed either directly or indirectly to the action of the beekeeper. Many experienced beekeepers mark their queens because they have learnt the hard way that it is easy to crush an unseen unmarked queen when manipulating the hive especially if insufficient room is left around a brood frame when removing or replacing it back into the brood chamber. If they see a queen on a comb they refrain from replacing the frame back into the brood chamber until she is well away from the woodwork and make sure they provide plenty of room on her side of the comb. A queen on the underside of a sheet excluder can be also be flipped off into the surrounding vegetation if it is peeled off a little too vigorously and a queen walking on the top bar can get crushed when sheet excluders are replaced a little too heavily. I have even seen queens flung off combs when a frame

was turned far too energetically by a beekeeper in too much of a hurry to examine the other side. During manipulation of the frames a queen can also drop off if she is among the festoon of bees hanging off the bottom bar. Beekeepers must get into the habit of turning brood combs gently and holding them over the brood chamber so that if she does fall off she lands safely back in her hive.

Ask any number of queen rearers and they will confirm that not all young queens return safely from their orientation and mating flights. A queen can simply lose her way back to the apiary, get eaten by insectivorous birds or get killed trying to enter the wrong hive within the apiary. Loss by drifting is a particular problem if hives and nuclei are arranged in straight rows with no obvious landmarks to help queens orientate correctly. Young queens and recently introduced queens are also at risk of getting balled and killed by the workers if their colonies are disturbed by the beekeeper opening up the hive prematurely to see if they have started laying. Balling and non-acceptance is more likely with 'travelled queens' (queens obtained through the mail) and when the introduced queen is from a different 'race' to the colony she is being introduced into. It is good practice to refrain from examining the combs in the brood chamber if you know a virgin queen is likely to be present, not only to reduce the risk of balling, but also because virgins are prone to flying off the comb during the manipulation. If this does happen it is best to close up that hive, not open any others and hope she finds her way back to her hive.

Another queenless scenario can occur during the swarming season. Inexperienced beekeepers sometimes destroy sealed swarm cells in a vain attempt to stop their colony swarming without realising that the prime swarm has, in fact, already left. At the next inspection a week later they discover and destroy another set of 'swarm' cells failing to recognise them as 'emergency' cells. They have effectively rendered their colony queenless as the colony does not have any young larvae left that can be converted into queens.

Many supposedly 'queenless' colonies do, in fact, have a queen. Many beginners

get obsessed with finding the queen each and every time they manipulate and worry if they do not see her. Just because you cannot find one does not mean there is not one. All you need is some reassuring evidence that she is present and laying. Workers flying freely and bringing back loads of pollen usually indicate the presence of a laying queen as brood pheromones stimulate the collection of pollen. Pollen provides the protein needed by nurse bees to make brood food for the young larvae and is also used to supplement the diet of older worker larvae. However, colonies with drone-laying queens or with laying workers also have brood (albeit drone brood) so the foragers will still be encouraged to bring in pollen.

Queenless or queenright?

Many beekeepers can recognise differences in behaviour between queenright and queenless colonies. Queenless bees are less steady on the comb and the colony emits a 'roar-like' sound. They also tend to be more aggressive than usual towards their beekeeper. In queenright colonies such behaviour is normally suppressed by both queen and brood pheromones. Apart from seeing the queen, the best evidence is finding eggs laid centrally and individually on the bottom of worker cells. You can then be fairly confident she is there or has been present in the last three days. If you do not find eggs in the brood nest the colony might indeed be queenless, but bear in mind that



*Top: Eggs laid by a recently mated queen.
Bottom: Eggs laid by drone-laying workers.*

eggs are quite small and not easy to see if you are long sighted. If you need to wear glasses for reading, then wear them when you go through your colony or use a magnifying glass (those with a built in light are ideal). Some beekeepers do not see the eggs because they do not look into the cells at the right angle or even select the right combs! If you do not find eggs in the brood chamber and the bees seem to be behaving themselves then maybe the queen is upstairs in the supers so check there for eggs and brood. If you find her in the supers put her back down into the brood chamber and check the excluder for gaps that are big enough to let her through. Some queens are so narrow they get through anyway.

During a strong honey flow with insufficient space in the supers the bees may fill the brood combs with honey leaving few cells for the queen to lay in. If a colony is desperately short of stores during a spell of poor weather a queen (particularly of the black British strain) may stop laying for a while. Feeding or the onset of the next flow usually gets these queens back in lay. Queens tend to cease laying when colonies are taken to the heather moors in August. I have noticed this on numerous occasions and believe it is a response to sudden change in environmental conditions.

If you cannot find eggs but do find sealed swarm cells then the colony has probably swarmed and so is temporarily queenless. A virgin queen should emerge in less than a week and you will need to take action to prevent secondary swarming. If you find a recently emerged queen cell then a young unmated queen is likely to be present. Sometimes workers tear down the queen cells after the queen has emerged leaving little evidence of the cell's existence. An emerged cell does not necessarily mean everything will turn out OK as queens do not always return from mating flights and, even those that do, do not always get mated properly. If you later find 'polished' cells cleaned out by house bees you can rest assured that they are being prepared for the new queen to lay in. A day or so before she begins to lay the increase in her pheromone production results in a noticeable improvement in the behaviour of the colony.

Young healthy queens often lay more than one egg per cell for the first few weeks. However, if you find several eggs per cell with some attached to the side walls

together with raised domed capping on brood in worker cells then not only do you have a queenless colony but have the added

in the brood nest will not be 'polished' and unsealed honey may be stored in the cells of recently emerged bees.

If you suspect your colony is queenless never try to requeen a colony unless you are absolutely sure of it. Check your suspicions by introducing a test comb. Select a brood comb from another colony containing eggs and young larvae. A beekeeper with a single colony will need to beg a suitable comb from another beekeeper. Having shaken the bees off the comb (back into their own brood chamber) insert it into the middle of what would normally be the brood nest. Mark the comb (using a queen marker pen) so you can locate it easily next time. After a week, examine that comb again. If you find emergency cells containing larvae then the colony is indeed queenless. Now you have to decide whether to leave

them with one good sized emergency cell or whether to introduce a queen cell from a better stock. However, if the colony becomes queenless at a time of year when there are no drones about for a young queen to mate with then the only options are to unite the colony with another one or to introduce a mated queen. Having queenright nuclei available throughout the year is good practice as you never know when you will need those spare queens. If you do not have a spare queen then maybe



Top: Hatched swarm cell. Left: Queen cell with hinged flap. Right: Sealed emergency cells. Below: Nectar in recently emerged brood cells.



complication of laying workers. The colony has been queenless for a while and without the inhibitory influence of the queen and brood pheromones, the ovaries of several workers have developed to the point where they begin laying unfertilised eggs resulting in drone brood. Those laid in worker cells develop into undersized drones. Such colonies tend to reject all attempts to requeen them by introduction of queens or queen cells.

If you cannot find eggs but do find occupied emergency cells, then the colony is queenless. Compared to others in the apiary the colony will appear less active with less pollen being brought back. Cells



Test comb with emergency cells.

someone in your association will provide you with a mated queen that you can introduce.

Gerry Collins, NDB

The Forager

Plan Bee

In my early beekeeping days, I was once told by a wise old beekeeper that 'there should be no nasty surprises in beekeeping — everything should go according to plan'. And so it has been ever since ... or has it?

To many beekeepers, events within their hives seem to come as a total surprise, whether it is swarms issuing, the sudden discovery of a high varroa population or the sudden and unexpected need for additional supers. But in reality, none of these occurrences should come as a surprise as in each case the tell-tale signs are there for all to see well in advance of the event itself. And here is the rub — the signs are there to be seen, so why do we not see them? I suppose that much of it boils down to why we keep bees in the first place; whether we do it:

- just to have a ready supply of honey;
- because it is a challenge to try to work in harmony with what is, fundamentally, a wild creature;
- because we want to learn more about bees, beekeeping and all of its related issues;
- because everyone else is doing it so it must be easy;
- because it is currently fashionable (and next year we will have moved on to collecting recipe books or whatever).

I will not make comment here other than to say that few people would take on any other form of livestock in the same casual way that bees are sometimes treated.

A four-part plan

Some beekeepers do actively plan their season and for them there are no nasty surprises. They decide what their priorities are and act accordingly. To make it easy, here are a few things that I find it useful to consider at this time each year so that I can make the necessary preparations.

Number one on the list has to be how to manage varroa since it is implicated in the vast majority of colony losses throughout the world. The sudden discovery, in autumn, of large mite populations need not be a surprise and can be completely avoided by planning and implementing a pro-active varroa management plan. Indeed, because most varroa control methods available for use in the autumn have a relatively low efficacy (around 70% at best), leaving varroa control until the autumn may actively increase the problems you might encounter. So, why not start varroa control in the spring by using a biotechnical method such as shook or artificial swarming or queen comb caging. They are all described in the NBU brochure *Managing Varroa* <https://secure.fera.defra.gov.uk/beebase/index.cfm?pageid=167>. Once you have achieved a low mite population it is fairly easy to maintain a low one unless you are unlucky enough to suffer a re-infestation from a collapsing colony.

Number two on the list should be to develop an active swarm management plan. Quite simply, you should decide whether you are going to avoid swarming by creating nuclei or by practicing artificial swarming or whether you are going to accept whatever your bees decide to do. What you should not do is try to intimidate your colonies by continually removing queen cells in the hope that the bees will give up before you do. This will inevitably result in demoralised colonies which will give up the will to live. If you decide to take an active approach, make sure that you have all of the equipment you need in good time and look out for the first

signs that your bees may be planning to swarm. If you have forgotten what these are the development of drone cells is a good early indication.

Number three could be to actively rear some queens to replace your ageing ladies. This will help with your swarm management plan as well as help maintain vigorous colonies. But a plea for some common sense here. In recent years I have seen queen rearing courses full to the gunwales with beekeepers still in their first or second year of beekeeping. By all means aspire to raise queens but do make sure that you have a sound practical grounding in beekeeping before trying to embark on some of the more advanced techniques.

Number four on the list is to learn more about beekeeping. Even if you have been keeping bees for thirty years, if you are open-minded about it, there is always more to learn. Whether you do it by reading books and magazines, attending association meetings and lectures, listening to other beekeepers or by studying for an assessment or examination depends on how best you learn, but why not set yourself the target of learning more this year? For me, this is where the nasty surprise comes as I find out each year just how much more I have to learn about this wonderful craft of ours!



Useful Fera leaflets. Photo: The Forager.

The Forager

BeeHiveMaker.co.uk
Quality hand made beehives



Northern Bee Auctions
2ND ANNUAL BEE AUCTION
ON THE 14TH
OF APRIL 2012
AT HOUGHTON
VILLAGE HALL,
CARLISLE
Map available on
NBA homepage

TOOLS
BEE FOOD
HIVE PACKAGES
COMPONENT PARTS
BEE KEEPERS CLOTHING

BEEES FOR SALE
NUCLEUS BOXES
MEDICINES
BEE HIVES / APIARIES
HIVE COMPONENT PARTS

**WE ARE ALSO AGENTS FOR AMBROSIA BEE FOOD PRODUCTS
BEEVITAL HIVE CLEAN / VITAFED PRODUCTS**

90 Ennerdale Avenue, Botcherby, Carlisle, Cumbria
Tel: 078304 32014 E-mail: harris622@btinternet.com
www.beehivemaker.co.uk www.northernbeeauctions.co.uk

Learning From Others: Solar Wax Extractors

On days when we are blessed with a bit of sunshine you may wish to use some 'free energy' to extract your old beeswax. If you have never tried this before and are stumped by how to go about this, Dr Chris Coulson, who has turned his hands to making solar wax extractors, is here to pass on his experiences and help you start.

What is a solar wax extractor?

Basically, a solar extractor is an insulated box with a metal liner inside and a glass, preferably double glazed, front. The glass lets the radiation of the sun into the box, the longer wavelength part of this is converted to still longer wavelength heat but the glass stops this from escaping. This is frequently called 'the green house effect'. Result — the inside gets hotter and at 62° to 64°C bee's wax melts. This all sounds simple enough, but if you want to make a bespoke extractor there are some points to consider before starting.

The size and complexity of an extractor is dictated by what you want to put in it, how much wax you want, how quickly you want it and when you want it. To build it, these considerations affect any 'used' materials you are looking for or those you need to buy. I cast my own foundation and I need a large amount of wax towards the end of the year so my extractor had to be large enough to reliably produce this. Other beekeepers may have different requirements.

Making a simple solar wax extractor

A small, simple extractor can be made using a deep roasting tray with a hole cut in the end and lady's tights stretched over this end. Alternatively comb etc can just be put into the tights and these into the tray. The tights filter the wax but they will need to be changed when they become blocked. This assembly can be laid into insulation inside another box (wood, plastic etc.) The insulation should be thick enough to allow something like a moulded 'bread tin' to sit under the hole in the 'roasting tin'. Loft insulation is the easiest to use, though polystyrene from packing can be used. A wire through the tray and the upper end of the box stops the tray slipping down. The front of the outer box is glazed and the glass set at right angles to the sun. Old double glazed units from houses being renovated are free and excellent. Do not try to drain the melted wax to the outside of box as it will solidify, block the hole

and attract bees. Small amounts of wax can be cleaned in this sort of small cheap extractor.

Frames are usually the biggest things that go into solar



A solar wax extractor deconstructed. Above left: The heat-collecting metal liner made from an old shelf. Above right: The metal liner held in place within an insulating box by wooden spacer pieces. Above centre: Melting wax using solar heat energy: old blackened beeswax has been melted, filtered through three mesh filters and collected in a leak-proof reservoir.

extractors and for this a larger extractor is necessary and its construction needs more thought. For the biggest that I built, I used an old door as the back of the outer box. To get an idea of the size for the metal liner you might need you can layout and stack frames but remember, the size of the liner affects the eventual size and weight of the finished article. My most recent extractor is mounted on an old supermarket trolley! This extractor used an old large metal shelf for the liner. The required net was drawn on the metal with 'felt tip' and the metal scored and bent while clamped to a table. A liner can be made with several pieces of metal as long as they overlap in a way that melted wax will not leak. Perhaps the sides

of old washing or drying machine or metal fence panels could be used if you do not want to buy a piece of metal sheet.

The box around the metal liner should be big enough to give about a 10 cm distance between the two and you need to insulate this space. Wooden spacers, top, sides and back, are used to hold the liner within the outer box. The bottom has to be insulated before the liner goes in. At the extractor's raised end the spacers need to be screwed through the liner as well as the wooden box to stop the liner slipping down inside the extractor. The outer box needs to be long enough to at its lower end beyond the liner to accommodate a container to collect the melted wax. Any leak-proof container can be used as long as it does not melt and holds all the wax that is produced in a 'run'.



The fully reconstructed solar wax extractor held facing the sun in a supermarket trolley. The solar wax unit, secured tightly so it does not fall when tilted, can be seen through the glazed front. All photos by Dr Chris Coulson.

Do not under estimate the space needed to house this container as a big extractor can produce several pounds of wax in a day. The glass front can be single glazed, home made double glazed or a factory built double glazed unit. I have used all three but commercial 22 mm spaced, 'K' (or equivalent) glass is best when framed and hinged to the outer box. Look up your local unit maker for bespoke prices. My current extractor has three mesh filters but I sometimes put wax back into the extractor in ladies black tights for extra filtration. The dross can be used as fire lighters.

To get the most out of a solar extractor there are some things about solar power that are useful to know, and these will be dealt with in a further article.

Dr Chris Coulson
Beverly BKA

Is this 'Roman' — or do You Know Better?

I was working for Mark, one of my regular customers, doing some plastering and plumbing work when he said... 'Have you seen my beehive?' I said: 'I didn't know you kept bees Mark'. 'I don't', he said 'but I came across this really old bee hive in one of my trades with a 'Mud Lark' who searches the Thames estuary for treasure etc! I paid good money for it. What do you think?'

I thought, here we go.... some tatty old skep covered in mud, chuck it in the bin, until he took the bin-liner off it and then: 'Wow! Where on earth did you get that?' Oh, I couldn't tell you everything he said, but it was found in the Thames about one hundred years ago and has been out of the mud since then. I like historical things from the Roman period so I bought it.

I asked why he thought it was from the Roman period and he said because that's what someone told the bloke he bought it from! I have looked on the internet and there is nothing like it from the Roman or ancient Greek periods, so when was it?

The wooden handle at the top is, I think, hazel and so is the lattice work; it is covered in mud/clay that is very smooth and there are four exit/entry holes around the circumference. It is approx 80cm high and 60cm across and there is evidence of comb attached to the top of the underside. Both of us are very keen to know some more if there is anyone who can shed some light on it.

Chris Rodgers,
Berkshire BKA



Apiary and Hive Hygiene

Every beekeeper should be aware of how to handle and inspect colonies so that any risk of disease transmission is minimised. The National Bee Unit have prepared the following information to help us understand and put into practice good apiary and hive hygiene. Help yourselves and your bees by using hygienic techniques.

While many diseases can be introduced to your hives by bees themselves, good apiary and hive hygiene can reduce the impact of disease and will help to minimise the risk of disease transmission between colonies and apiaries. Hygienic practices should extend to cover hives and frames, equipment and clothing as well as the apiary itself.

Equipment

- ❑ Equipment such as hive tools, uncapping forks, forceps, etc. can be very effectively cleaned in a solution of washing soda dissolved at the ratio of 1kg of washing soda to five litres of water. Avoid splashing this solution on hands or into eyes as it is an irritant.
- ❑ Hive tools can either be soaked in the washing soda solution or can be cleaned using a scouring pad or stainless steel scourer.
- ❑ Smokers should be regularly cleaned paying particular attention to the bellows. Any accumulation of wax or propolis should be scraped off and then the residue cleaned using the washing soda solution and a scourer.
- ❑ Brood boxes can be cleaned by scrapping away any accumulations of wax and propolis and then 'flaming' them with a gas torch to minimise the risk of bacteria persisting. This is particularly necessary after a diagnosis of foul brood disease. Other measures will be necessary where brood boxes are not wooden.

Clothing

- ❑ Try to ensure that all clothing and equipment is clean and free from accumulations of wax, propolis etc. before commencing any inspection of a colony.
- ❑ Bee suits should be regularly washed in accordance with the manufacturers recommendations; a half cup of washing soda added at the start of the wash will help to remove propolis, wax and honey staining; it may be advisable to reduce the amount of washing additive when adding washing soda.
- ❑ Gloves should always be clean at the start of an inspection as any odours from previous stings etc can cause further stinging actions. Disposable gloves are very useful. If you feel that you need the security of traditional thick leather gloves, wear disposables over the thick gloves.
- ❑ Always dispose of disposable gloves in a secure receptacle where bees cannot get at them.
- ❑ If boots become covered in honey, they should be regularly cleaned; again a washing soda solution will be an effective cleansing agent.

In the Apiary

- ❑ It is useful to have a small sealable container into which brace, burr and other scrap wax can be placed and taken away from site. Old comb discarded in the apiary can set up robbing and

can be a vector for disease transmission.

- ❑ Avoid leaving old combs and other equipment lying about in the apiary.



RBI Ian Molyneux demonstrating the hygienic examination of a colony at an association practical event. Ian is wearing gloves and can be seen using a variety of equipment boxes, a wash pot, a debris bucket etc. as part of his inspection.

In the Hive

- ❑ Regular comb changing can lead to improvement in the health of your bees. Brood combs should be replaced with new foundation at least every three years.
- ❑ When inspecting colonies, avoid crushing or squashing bees; the use of dummy boards can assist in this respect.
- ❑ Avoid using 'inspection or cover cloths' as these can harbour disease which could be spread from one colony to another.
- ❑ Try not to swap frames around in the hive (or between hives); replace them in their original sequence and orientation.

**National Bee Unit,
Best Practice Guideline**



Suppliers of Glass and Plastic Containers & Closures

**The Home of our
"Quality British made Honey Jar"**

Our standard 1lb Honey Jars are made to our own specifications in quality glass.

We specialise in supplying many associations including members of BBKA & Bee Farmers Association. Our prices for large and small orders are very competitive and we can arrange deliveries nationwide.

For further details on our Honey Jars or any of our other products, please get in touch with our Sales Team, we'll be pleased to hear from you.



Compak (South) Ltd
2, Ashmead Road
Keynsham, Bristol BS31 1SX
Tel : 01179 863 550
Fax : 01179 869 162
Email : sales@compaksouth.co.uk
Website : www.compaksouth.com

On the Bookshelf: The Bees

Carol Ann Duffy
The Bees
ISBN: 9780330442442
London: Picador, 2011

This is the first new adult poetry collection since Carol Ann Duffy became Poet Laureate in 2009 and although a slim 84 pages, this is a handsome hardback on looks alone. The turquoise dust jacket is decorated with gold, matching the sewn-in ribbon bookmark; touches which make handling — or better still owning — the volume a pleasure not matched for Kindle owners.

The bees in the poems also represent the environment and our responsibility to nurture the planet. This stands out in 'Virgil's Bees' — a poem written in 2009 as world leaders met in Copenhagen at the 10:10 Climate Change Campaign. Duffy's love and understanding of the bees sings out in every line, but just to make sure, she ends with a reminder:

*'... .. bees
Are the batteries of orchards, gardens, guard
them.'*

alliteration — one of Duffy's signature poetry terms, which begs you to read aloud. Another favourite in 'Virgil's Bees' is her love of lists. She describes honey:

*'... .. inspired by clover,
marigold, eucalyptus, thyme.'*

The naming of flowers raises a smile of familiarity and pulls you in, regardless of your relationship with poetry. Especially when followed by her support for we bee guardians:

*'Bless the beekeeper
... .. Who chooses for her hives
a site near water, violet beds, no yew,
no echo ...'*

While many of the poems are about bees directly, others may have a more hidden mention, and the bees seam together both national and intensely personal poems, leading us on, like the waggle dance. So lovers of rhythm and lists will also enjoy spotting the traditional pub names in 'John Barleycorn', which the poet told us required no research.

University, Duffy shares with us both her joy in her daughter Ella ('Crunch', 'Orta St Giulio') and the grief of her mother's last moments ('Water'), yet still she shares our world. 'Cockermouth and Worthington' commemorates the 2009 events with an overflow of alliteration emphasising the deluge:

*'No folk fled the flood,
No flags furled or spirits failed —
One brave soul felled. ...'*

In 2010, she also followed England's concern over David Beckham's injury ('Achilles'), and 'Rings' is her tribute to the royal wedding earlier this year. While the word love is never used, the sentiment escapes from every line. As beekeepers though, her tongue-in-cheek homage to Shakespeare takes us away from the idyllic bee poems, to darkly describe the scenery of:

'... land monotonous with cereals and grain,'

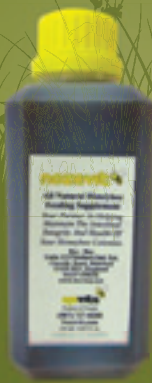
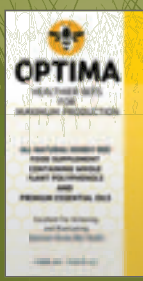
I leave you to find out how she has woven 'neonicotinoid insecticides' into this poem.

Word-lovers will have spotted the Creative Director of the Writing School at Manchester Metropolitan

Julia Wallis, Warwickshire BKA

Are your bees healthy?

Bee-Bay provides **organic** products for the treatment of Varroa, Nosema apis, Nosema ceranae and Chalkbrood



BeeVital Hive Clean
Treatment for Varroa problems which cleanses bees from parasites and invigorates bees.

Nozevit
Produced from all natural substances.

Optima
Contains whole plant polyphenols for intestinal cleansing.

BeeVital Chalkbrood
Treat the affected brood to keep them healthy.

BeeGuard
Unique technology inhibits the growth of bacteria without harming your bees.

Unit 1-2 Fletcher Ind. Estate, Clovelly Road, Bideford, Devon EX39 3EU
Tel: 01237 470236 Mob: 07706 969622 Order online at www.Bee-Bay.net

Difficult Colonies

Have you suffered from aggressive bees and been unsure what to do? For those who are still perplexed master beekeeper, Brian Gant, explains how we can best manage such difficult colonies.

'Breed from the best and cull the worst' is good advice for members. Most of us at some time come across a colony which seems determined to chase us away. Worse still are the bees who object to your neighbours; these are bees with genes making them overreact to intruders or to a shortage of queen pheromone. More difficult to explain is the bad behaviour of some bees when working autumn sown oil seed rape.

How best to deal with difficult colonies

The quick and nasty way of dealing with such bees is to block the entrance when flying has stopped and to pour about 250ml of petrol through the hole in the crown board (remember to cover the hole with a piece of wood or metal mesh earlier). This is drastic, but effective. I was surprised to find that the brood combs could be reused after airing. If there is honey in the supers then put a clearer board under them and probably an empty super under the clearer. In this case use a hole in the clearer board to deliver the petrol. A much more attractive method is to requeen the colony using a queen raised from a more desirable strain. This will take a few weeks unless you have a spare one available. You will need to consider whether the bees need to be moved.

Restrict the spread of difficult bees

I try to limit the spread of these undesirable characteristics; there are various ways of stopping drones from leaving the hive, none really satisfactory. The simplest way is to pin a piece of queen excluder over the entrance, but check that the drones do not block the entrance. The next stage is to damage drone larvae and to remove the queen, these two operations can be combined. When the bees are flying well put a spare floor close to the brood chamber and transfer the supers to this floor. Put a crown board over the brood box and a strap to hold the old floor, brood box (or boxes) and crown board together while you move them a few yards away out of the flight-paths of the bees. Now take a rest while the flying bees return to the supers on the old site leaving the brood chamber less crowded with young bees and the queen. Keep a check on the entrance and reduce it if there is any sign of robbing, when there is less activity at the entrance you are ready for the next stage.

Eliminate the queen

Go through the brood frames fairly quickly, but gently, looking for the queen. When you find her, kill her. If you do not find her then go through the frames again slowly this time. If you are still unable to find her look at the bees on the sides. National bottom bee spaced hives have a gap at the bottom of two sides, intended to give a bee space above the lugs of a lower box; the queen sometimes hides in there. About 10% of hives have two queens so continue looking even after removing one. You have now looked at all the brood frames twice, without finding her so I suggest going

through one more time but now shake most of the bees off each frame and squash any queen cells and damage all the drone brood. If you have not found the queen then she is probably hiding on one of the sides. Depending on how you are feeling and how the bees are behaving you need to decide whether to reassemble the hive and try again another day or to put the brood frames into another box to continue the search.

Raise better queens

Having disposed of the queen the bees should be seen to be apparently searching for her. The next stage is to give the bees young, well fed larvae from a well behaved colony. Another decision is needed at this stage; will you wait for a week to go through the brood chamber again destroying all queen cells started on the old queen's brood before giving them young larvae? That way you are sure to get the bees using the larvae which you provide. Or do you save a week by giving them larvae straight away? In this case it would be wise to look for queen cells after a few days. My preference is to give them the larvae straight away, if they do not raise the queens I want on this attempt then I have to go back to the other option by taking out all of the queen cells raised on brood from the colony.

To raise good queens you need to have plenty of well fed young workers and newly hatched larvae. There are many ways of giving them suitable larvae: the easiest is to give a frame which has tiny larvae, a more controlled method is grafting. This needs practice, but gives you almost complete control of the larvae.

Whichever method you choose leave nine days before opening the hive, you will make the work easier if you move the brood chamber to one side, as above. Very gently lift out the frame you inserted, count the number of sealed queen cells and look to see if the bottom of the cell has been thinned ready for the virgin to emerge. If there is a possibility that the workers have raised queen cells on other frames then you must remove them.

Avoid a swarming tendency

Now the final stage. You do not want the colony to swarm so you could do an artificial swarm leaving one queen cell on the original site. My preference is to make up nuclei with two or three frames and at least one queen cell. On the evening of the next day give the nucs some thin syrup to keep them well fed.

After three weeks all queens should be laying, if in doubt give a test frame with larvae. You may well find that the bees in the colony you started from are now much more amenable, and you have one, or more, nucs so if the problem occurs again you will be able to requeen more quickly.

Brian Gant, Master Beekeeper, Devon BKA



Checking a hive for brood condition and queen presence. Photo by David Wootton.

DVD Review: Beekeeping for Beginners

Beekeeping for Beginners is a DVD from Stitchcombe Productions with James Dearsley from Surrey BKA. It is reviewed by an inexperienced and experienced beekeeper.

Thoughts of an inexperienced beekeeper

I watched this two hour DVD from start to finish in one sitting and the impression I had at the end was that if I was a complete beginner watching it I might be more than a bit confused by the end. The concept is that James Dearsley is an experienced beekeeper who is going to teach TV gardener, Charlie Dimmock, how to keep bees. We do not learn what James's credentials are (except he says he has kept bees for several years) but he is very engaging and enthusiastic and he clearly loves his subject. He talks very quickly, cramming lots of information into his chats with Charlie. Poor Charlie looks quite confused on a number of occasions, for example when James rattles through the life cycle of bees! He does not explain the most basic point i.e. that colonies have one mother but many fathers and what that means. Instead I was left with the impression that the most important thing to know about bees is that they like to swarm, but I do not recall him explaining exactly why they do this.

He rattles through the lifecycle of bees, personal equipment, the various types of hive and so on. I did find the section on suitable clothing quite useful, but I was a bit concerned later when he appears with grubby gloves. I have never forgotten my beekeeping mentor stressing the importance of hygienic gloves and suits, so this jarred. Along the way we hear him use various terms such as: drawing out comb, dummy boards, swarms, varroa, deformed wing virus, colony collapse disorder, AFB, EFB, supersedure etc., but I felt that none were satisfactorily explained. The most informative sections are where James calls on various experts to help explain things. I was glad to hear about bee inspectors and Fera and he does mention local associations, but he does not explain how you could find out about your nearest association.

I am not sure this DVD should be relied upon to give you the basics. It strikes me there is no substitute for proper hands-on training with the support of a beekeeping mentor and a strong local association. What it does have are some good shots of bees and beekeeping equipment and I can see it potentially forming the basis of some lively discussion with groups of beginners.

Gill McLean, Ludlow BKA

Opinion from a more experienced beekeeper

As a long-time teacher of beekeeping I am particularly interested in items that will help potential or new beekeepers. The title suggests the content is suitable for those who have already got bees, but in my opinion it is not, because there simply is not enough information.

It is very chatty with an obviously enthusiastic beginner describing beekeeping to a celebrity. This I felt was rather gushing, so not easy for a non-beekeeper to take in. It took up time that could otherwise have been used to give information or to reduce



the length, which I found rather long. There are the usual 'bee facts' that I always find annoying, as well as being littered with basic 'howlers' that I think most of the beginners I deal with would have spotted. These include disinfecting your hive tool with bicarbonate of soda (it should be washing soda/sodium carbonate), dabbing a marker pen on the queen's abdomen to mark her (should be thorax), referring to chunk honey as cut comb honey and putting wet combs back on a colony in the morning (should be the evening). I was particularly annoyed by the reference to beekeepers stealing all their food and nicking all the honey, neither of which is a good image to give non-beekeepers. I did agree with a Porter bee escape being referred to as a 'contraption' though.

In my opinion the best part is the chapter on disease that encouraged regular checking, but I consider the chapter on swarming is very muddled. A supplier of bees warns against starting with a swarm because of disease. In nearly fifty years of beekeeping I have only known of a swarm to have had foul brood on one occasion, yet I have known of many colonies of bees on combs being sold with it and there have been quite a lot recently. Overall I was quite disappointed as I think this DVD will result in yet more people coming into beekeeping who are under-prepared for the reality that already overworked beekeeping associations will have to deal with.

Roger Patterson, Wisborough Green BKA



Solway Bee Supplies

Manufacturers of Quality Bee Hives

Full range of Cedar Bee Hives
Made in our own workshop
Suppliers of Bee Keeping Sundries
A wide range of equipment available for the novice or experienced bee keeper

For information, Catalogue, Orders
Tel: 01557 680400
www.solwaybeesupplies.co.uk
E-mail: Sales@solwaybeesupplies.co.uk
Unit E, Kempleton Mill, Twynholm, Kirkcudbright DG6 4NJ

Learning from Others:

Queen Rearing for Beginners

Over the next two months, I am going to pass on some of our experiences gained when attempting to raise queen bees within the Sedbergh and District BKA. In this first article, I will, hopefully, awaken your interest in the queen rearing process and next month I aim to provide some practical wisdom.

I am a beekeeper of twenty years experience (more bad than good). In 2008 I moved my bees and my family from sunny Hertfordshire, to the northern tip of Lancashire and then joined the local beekeeping association Sedbergh and District. It is a small but enthusiastic club, and with the huge growth in popularity of beekeeping in the last few years like many associations it did not have many experienced beekeepers, and I suddenly found myself being looked on as an expert !!

With this new found 'status' came a feeling of responsibility and I found out there was very little in the way of managed queen production. New colonies were provided to new beekeepers from swarms collected leading to a tendency for the local bees to be 'swarmy'. There were also the usual problems of finding queens in the hives and issues of honey productivity.

I suggested that we should have a go at queen rearing ourselves to see if we could produce our own queens; I volunteered to lead the scheme, but said I had no experience of doing it. The principle was accepted willingly by the association and we moved on to have a go in the summers of 2010 and 2011.

Some success and some experience

With no experience I resorted to reading books. I used Ted Hooper's book *Bees and Honey*, Ron Brown's book *Honeymoon Flats for Honeybee Queens* and Brother Adam's book about the Buckfast bee operation. I did have some success in the summer of 2009 making my own queens for my own use. I did this by selecting the best and strongest colony in the late spring and giving it enough room and encouragement to fill two Langstroth brood boxes. Once it had done that I isolated some frames of eggs and very young larvae in one brood box by the simple trick of putting the queen in the bottom brood box and the other brood box on top of the pile, isolating the brood using two queen excluders and a super. This worked very well and some lovely queen cells were drawn out using Ted Hooper's method.

My problem with this came with counting the number of days and my bad beekeeping skills resulted in the bees doing what comes naturally in circumstances of queen cells in the hive — yes they swarmed !! But all was not lost and I made up some nuclei with the frames and they produced some lovely queens; I think it was three.

Invaluable support led to progress

Now, I understand that clever people call their mistakes

'experience' so with the 2009 mistakes in mind we decided to get in an expert to help us avoid similar mistakes for 2010. Our bee inspector, Stewart Beattie, very kindly gave up his time to come and give the association two talks with equipment and heaps of practical knowledge as well as loads of encouragement. We are very fortunate to have someone as willing as this to commit time to us amateur beekeepers.

With Stewart's advice, we purchased a Jenter kit and six apideas (mini nucleus hives) ready for the 2010 season and then had some days set aside in our association programme to start the queen rearing process. We used those days to assemble the apideas and put in the foundation, to familiarise ourselves with how apideas work and also to get the Jenter box in a brood frame ready for use.

“

I did have some success in making my own queens by selecting the best and strongest colony in the late spring, and then giving it enough room and encouragement to fill two Langstroth brood boxes. Once it had expanded I isolated some frames of eggs and very young larvae in one brood box using two queen excluders and a super. This worked very well and some lovely queen cells were drawn out using Ted Hooper's method.

”

Next month I will tell you how we got on and what lessons we learnt from the two years of trying; our successes and failures. In the meantime, however, perhaps you would like to consider the following questions:

1. Do you currently raise queens for your own use?
2. If not, who raises them for you?
3. Should your association be raising them?
4. Who has previous experience of queen rearing that you can learn from and with?
5. How are you going to raise the queens; grafting/Jenter/double brood box?
6. Do you already have the kit you need to do it?
7. Can you get support from your Bee Inspector/BIBBA/neighbouring association?
8. Are you going to try this year — if not why not?
9. Do you want to really learn about bees and how to handle them?
10. Do you want the pride in having raised your own queens?

The time to do the thinking about all of this is now so that you and your fellow beekeepers can have a go this year. I am no expert and this is not going to show you how to become one. But what I want to try and encourage you to do is to think about having a go. We did, and we all learnt from what we did in 2010 and 2011.

The real proof of our results will come in 2012 (I hope) when we will see those 2011 queens really hit full power and, hopefully, the qualities of the bee that we selected for handling and honey production will be realised in the queens we reared. If they are not then I am confident that we will keep going so that we can then reach the stage when we, as a club, can be confident of the quality of our local queens and have the ability and skill to be able to raise two or three batches of queens in what passes for our 'summer'.

Andrew Royce,
Sedbergh and District BKA

Beekeeping Modules — Do They Fulfill Their Purpose?

Ian McLean has been mulling over changes in teaching and in knowledge requirements, both for students and their teachers, as beekeeping education has evolved. This has led him to pose an interesting question about the BBKA beekeeping modular exams — ‘do they fulfill their purpose?’ What is your opinion on this?

For the last seven years, I have tried to answer the demand from Lancashire beekeepers for assistance in studying for the beekeeping exam modules. What has surprised me is the way I have had to study myself, not only to keep up-to-date but to expand my knowledge of the scientific side of beekeeping. Conversely the number of questions on practical beekeeping techniques has declined dramatically and so instruction time has echoed this decline. The Modular exams have evolved over the years and I feel the Board should review progress and ask themselves whether they are training the Master beekeepers in the most appropriate way.

Knowledge gaps are revealed

In discussion with the Moderator, the view was expressed that candidates for the Advanced Husbandry are often weak in notifiable disease recognition, swarm control and honey preparation skills. The syllabus is very wide-ranging and successful candidates can congratulate themselves on acquiring wide background knowledge to apply to their practical beekeeping. From the results, however, we need to help them to do that. What can be done to improve the training of our future experts? The Advanced Theory Certificate is usually followed by the Husbandry modules.

Beekeeping is essentially a practical ‘hands on’ hobby. ‘How does this test the candidate’s practical beekeeping?’ is a question that should be in the minds of every examiner when setting the papers. There is a core of beekeeping knowledge, which candidates should know and be tested on; if they know that they pass, better candidates will show a wider knowledge which is a credit to them, a few, you can hardly fault for their wide knowledge.

Do senior exams benefit rote learners best?

My own view is that the examiners ask too many factual questions, certainly at the senior level, instead of asking for, say, how a beekeeping technique works or discussing the principles behind an operation. Knowing facts reigns supreme, the student with a retentive memory is favoured over the ones with ability to reason and link disparate ideas. My heart sinks when I see ‘good practical beekeepers’ struggling when faced with the volume of facts that are asked in the papers today. I would scrap the 10, one-point initial questions, which encourage this testing of beekeeping trivia. Facts can always be checked before lecturing, but an understanding of principle is vital to communication.

Improvements needed in disease knowledge

The Moderator wants training on disease improved. I make my students learn anatomy (Module 5) before teaching the Disease Module 3. I argue that they cannot get a proper understanding of disease if they do not understand the organs affected by disease. Candidates need to pass the Disease module for the Intermediate Certificate. Disease then forms no part of the Senior Syllabus until it appears as paragraph 8.21 in the final module; there are two supporting paragraphs on hygiene. It used to form 25% of the senior exam; the Board is signalling that it is a very minor part of the senior syllabus.

Do we need to re-evaluate grading criteria?

Turning to Swarm Control. It appears as a one-line paragraph, 1.18, in the Intermediate Modules and then reappears as another one line, 8.17, in the final module. The criterion for the senior used to be ‘know one practical method of a beekeeping operation for Intermediate and be prepared to argue the pros and cons of many methods’. There is no indication of its importance and no guidance to examiners or candidates that it is a vital topic. I searched the queen rearing and bee breeding papers for practical questions and only found one in a four year span.

Clarify the core syllabus

I suggest that the Board consider and define the core part of the syllabus that they feel all experts should know, and then concentrate on testing knowledge in that area in 60% of the questions asked. Highlighting this as core knowledge would alter the focus of training. This would ensure that all candidates had a good grounding and the high flyers would still be able to demonstrate their skills. Reinstate compulsory question(s) on key topics.

Each revision of the Modules adds more and more paragraphs to the syllabus. This shift is self-perpetuating in that if you emphasise theory you get candidates who excel in theory but are weak in practical skills and they in turn become examiners.

Let us restore the balance in the exam questions and make practical knowledge something which should be taught. It was 50% of the knowledge required. Let us restore it to its former importance, it will result in better beekeepers all round.

Ian McLean, NDB

ECJ Ruling on GM Pollen in Honey: An Update

The EU Standing Committee on Food Chain and Animal Health (Section Genetically Modified Food and Feed and Environmental Risk) met on 14 November 2011. The following information was received from UK representatives at the meeting.

The EU Joint Research Centre is still working on the development of suitable testing methods for GM pollen in honey. The Commission (DG SANCO) is continuing its internal discussions on what needs to be done regarding the intentional/natural inclusion of pollen in honey, but does not have a position to report at this stage. Member States (MS) were reminded that the presence of GM pollen in honey is not regarded as a safety issue and that information from MS on the

impact of the ruling would be needed.

The UK reported that it had collected information from UK trade associations that highlighted significant costs associated with the GM aspects of the ruling, as testing costs would be highly significant in relation to the cost of each honey consignment. The alternative to extensive testing was to establish supply lines for 'GM-free' honey, which would inevitably attract a large premium. In either case the additional costs would lead to increased prices for the consumer and a potential reduction in demand, which in turn could affect the viability of honey importers and packers. In addition, there were concerns about the re-labelling of honey and food containing honey to indicate the presence of pollen as

an ingredient. A summary of the data collected is to be made available and it may help the Commission in its deliberations.

So what do BBKA members need to do?

The short answer is nothing at the moment. BBKA representatives will attend any meeting called by the UK authorities to discuss the subject. The BBKA will keep you informed via BBKA News and please periodically check on the BBKA website www.bbka.org.uk in case announcements or updates are made between the publication dates of BBKA News.

Dr David Aston,
Chair, of Technical and
Environmental Committee

Study Groups: One Way to Better Beekeeping

The BBKA is committed to helping local beekeeping groups develop training plans to assist the large number of people who have taken up the craft in recent years. One way in which we can do this is to encourage the formation of study groups to help beekeepers continue to study — whether to take our formal examinations or simply to be better beekeepers.

While it is possible to study very successfully on your own or through a correspondence course there is no substitute for learning in a small group with people at a similar level. To give people the confidence and information to set these up BBKA has arranged a series of regional events specifically for beekeepers who would be willing to facilitate setting up a study group. The events should provide you with the 'tools' to set up such groups.

Study groups can be specifically aimed at one or more modules of the BBKA examinations system, or they can be structured around one of the Course in a Case (CiC) learning modules, or simply be aimed at improving understanding of bees and beekeeping. Whatever the motivation a well run group, led by a knowledgeable beekeeper, can improve the skills of a number of beekeepers and I would urge you

to join in the education of others.

During these whole day events we explore how groups can be made to work really effectively through the use of a wide range of resources including recommended texts, internet based work-groups and problem-based learning techniques. We will also explore how the more advanced (Red and Green) CiC can be used to maximum benefit in these groups. The remaining winter training events in 2012 are:

11 February	Crawley, West Sussex
25 February	Salisbury, Wiltshire
25 February	Ormskirk, Lancashire
10 March	Colyton, Devon

Putting training at the heart of your association programme A training event for association committee members

Some associations are excellent at training and already run a wide variety of events. Others with a large influx of newer members and perhaps only one or two more experienced beekeepers struggle to know how to start a training programme. We have therefore organised an event aimed at committee members who wish to explore the many ways in which training can be built into an association's regular

programme. It looks at all levels of training and explores how training processes can be used to suit members' locations and the available level of expertise.

If you want to get involved in running a training programme and want to help your association develop a wider range of training for your members, then this is the event for you:

17 March 2012, York College, York

All these events are free of charge — the location costs are paid by the BBKA. For more information, contact Bill Cadmore, BBKA Regional Training Coordinator, via bill.cadmore@ntlworld.com or 0113 216 0482.

In the past couple of years the BBKA has spent a lot of time and money developing resources such as CiC and it is keen to assist local groups to advance their education and training for local members. I urge those of you who have progressed beyond beginner beekeeping to get involved in the training of those who are starting with this fascinating craft. With your assistance their learning will be greatly improved.

Martin Smith,
Chair Delivering Education Group

Business Corner

The BBKA Website Swarm Collectors' List

At the BBKA Forum 2011 the BBKA swarm collectors' list was the source of lively and robust debate and some members have voiced misapprehensions, misgivings or misunderstandings, which I shall address here. We all know the general public may panic when they encounter masses of flying insects in/on their property. If a beekeeper cannot be contacted easily or quickly worried members of the public may resort to using pesticides, resulting in dead bees or injury to other people. Beekeepers provide a valuable service by giving advice and/or removing swarms; they also benefit through good PR and bees are saved rather than destroyed.

The BBKA Website contains a swarm collectors' list facility, developed to improve the old, generally unsatisfactory system, and designed to supplement and not replace local swarm collection arrangements. The new facility is intended to:

- Ensure that only BBKA members are on the list.
- Ask Associations to nominate suitable Collectors and Coordinators to provide a critical mass at start up.

The system is based upon postcodes because this is the most secure method we have found to identify a local beekeeper as neither the honey bee, nor members of the public recognise association boundaries. A member of the public trying to find a swarm collector enters their postcode on the webpage and the names and telephone numbers of all Collectors within a ten mile radius are displayed. As a backup, in case no contact can be achieved, the system also returns the nearest two Coordinators within a 25 mile radius. For the system to be effective it relies upon being fully populated for all areas, which means listing more than one coordinator for an association area; clearly, if a sole coordinator is not contactable the system fails. Being on the list

simply signifies that a person is willing to be contacted when available to collect and/or coordinate swarm problems. However, difficulties have arisen mainly because some areas had very poor coverage. Some associations ensured all members were fully informed and asked if they wished to have their name submitted, but others did not.

When the website went live members discovered the swarm list facilities and many volunteered to be involved. This swelled the volunteer ranks and dramatically improved coverage, but the downside was that the system for associations to approve volunteers on the list became overwhelmed. As a result of associations' comments, the BBKA has decided for 2012 to withdraw the facility for self-nomination as Swarm Coordinators, leaving associations to supply those names. Initially we will ask associations to nominate Swarm Collectors, but will retain the right to open up the facility for self-nomination if insufficient numbers are supplied. Retrospective reports will be provided so that anybody deemed unsuitable with good cause can be removed from the list. We hope associations will nominate all those willing and able to take on this important task.

The criteria to decide who can be included on the list are determined by individual Associations. The BBKA believes that members need to be aware of the process adopted within their Associations. The system is very simple and it works. There have been thousands of website contacts, and the clear information and advice on the website must have helped to reduce the number of false swarm calls.

David Teasdale,
BBKA Website Working Group Chairman

Huge Buzz from Bee Competition

Anne Bennet and Marilyn Hawkins, from Conningsby, Lincolnshire, were the lucky joint winners of the BBKA Alex

Monroe necklace competition after

they both 'adopted a bee hive' to show their support for the honey bee. The silver necklace with gold plating shows a honey bee perched on a daisy. It was specially commissioned from jewellery designer Alex Monroe by the BBKA, and Alex kindly donated the necklace to help boost sales of Adopt a Beehive.



The daisy and bee necklace specially designed for the BBKA and donated by Alex Monroe.

The winners have been friends for 43 years and plan to share the necklace. Anne Bennet celebrated her win in a

setting fit for a Queen, by wearing the necklace to view the exhibition of the recent Royal Wedding at Buckingham Palace. Marilyn Hawkins wore the necklace in equal style to celebrate her husband's 65th birthday.

Anne commented: 'Adopting a bee hive is a brilliant way for people who want to get involved with supporting British bees but cannot keep beehives themselves.' Marilyn was also thrilled with their win: 'This is our second year of adopting a bee hive and it was a lovely surprise to have won the necklace,' she said.

The necklace is available to buy for £165, with £30 from each sale being donated to the BBKA to help fund its continued work to protect the honey bee.

Rosie Burke,
Adopt a Beehive with BBKA

NORTHERN BEE BOOKS

only a phone call away for the widest range

01422 882751

www.groovycart.co.uk/beebooks
<http://beekeepers.peacockmagazines.com>



Northern Bee Books
 Mytholmroyd, Hebden Bridge HX7 5JS (UK)
 Phone: 01422 882751 Fax: 01422 886157

BEEHIVE LODGE FOR SALE
 camping lodge / garden office

High quality spec
 Siberian Larch
 Insulated
 LED lighting
 UPVC French doors
 10' x 8' (internal)
 £9,950 inc. VAT

www.beehivelodges.co.uk
 Beehive Lodges, Beehive Lane, Cumbria LA8 0AJ Tel. 01539 733881

www.thebeeshop.co.uk

Quality Beekeeper Clothing At Affordable Prices
 Full suits, smocks, bee vests and veils
 Discounts for schools, courses & multiple purchases
 Contact: michael.duckett@virgin.net

BEEHIVE FLOOR MESH
 Black epoxy coated wire mesh 450mm squares to suit National Hive
UNBEATABLE PRICES!
 £24 per 5, £40-10, £76-20, £165-50 including DIY plan and postage
 Langstroth, Smith and Dadant same price
 Peter McFadden "Ynysgoch", Tynygroes, Conway LL32 8UH
 Tel 01492 650 851 email: peter@honeyfair.freemove.co.uk

Good Quality 2011 and 2012 Nucs

British queen, quality frames and professionally made wooden nuc box included. Available in Commercial, National and 14x12 sizes.
 Phone: Tim on 0139 427 4386 or on 07503773630
 or email mrbees@hotmail.co.uk for details
www.mrbees.co.uk

To advertise here please contact
advertising@bbkanews.org

Bees For Sale

Overwintered Nucs for collection in April — £200
 Locally raised Buckfast Queens and Nucs from May onwards
 Oxfordshire Honey in 32 lb buckets £3.00 Per lb
 For all details see www.honeybeesuppliers.co.uk

Beckys Beezzz

Ambrosia fondant & liquid, Feeders, Rauchboy Smokers,
 Varroa Treatments, Beekeeping Suits, Queens & Nucs.
 Taking orders for 2012 over-wintered Nucs.
 All at very competitive prices
www.beckysbeezzs.co.uk Tel: 01264 351104/07973 423628

Bee Books new & old



Construction information for Dartington hives. Just out!
 A4, 60pp, 70 illustrations, £21 incl. post
 BBNO, Ash View, Tump Lane, Much Birch, Hereford, HR2 8HP
 Tel: 01981 540907 www.honeyshop.co.uk

Barleywood Bees

Hard working near native Bees for sale
 Email: paulvessey@talktalk.net
 Tel: Paul Vessey 01652 628533
www.barleywoodbees.co.uk

BEES, QUEENS AND HIVES
 Used B.S. National hives for sale with bees as a result of fully adopting the ZEST concept. All sold on 4 brood boxes. £250 each. Buyer collects during Winter and early Spring.
ALSO
 Ripe queen cells. (5 minimum order). £8 each. Buyer collects in late Spring to late Summer.
 The queens are a locally mated first cross from a Buckfast breeder queen obtained from Keld Brandstrup in Denmark. They are quiet and productive.
 Bill Summers. Sturminster Newton
 01258 473015 e-mail
williamfsummers@btinternet.com

Caddon Hives National & WBC Hives
 made from Cedar

Includes:
 1 Apex Roof
 1 Crown board
 2 Super box (1 for WBC)
 1 Brood box (14x12 available)
 1 OM Floor (WBC with feet)
 3 Lifts and porch (WBC only)
 Bee escapes, mesh & inspection tray, entrance blocks all included!

£156

Call: 01896 850249 or visit
www.caddon-hives.co.uk

Park Beekeeping Supplies
 Suppliers of quality Beekeeping equipment

Hives Extractors Package Bees Filtration Clothing Starter Kits

17 Blackheath Business Centre Tel: (020) 8694 9960 Email: parkbee@rawmunro.com
 78b Blackheath Hill, Fax: (020) 8694 8217 www.parkbeekeeping.com
 London, SE10 8BA

Your Letters



Oxalic Acid

On reading 'In the Apiary' in November BBKA News the recommendation is a mixture of 45g of oxalic dihydrate crystals in 1 litre of 1:1 sugar solution for the dribbling method. Now, I have been using oxalic acid as a winter treatment for several years and I mix my own. I purchased oxalic dihydrate crystals from a reputable source and was given detailed instructions to use only 35g in a litre of syrup and no more. On performing a quick search on the internet, this concentration is supported by the British Colombian Ministry of Agriculture, while BeeBase advises 32 to 42g.

This has left me in a bit of a dilemma. Have I been under-dosing and could this lead

to a build up of resistance? Or, is there some new evidence to support the use of a 28% stronger solution. For now I have stuck with what I know but wondered if anyone could provide some clearer guidance.

Paul Back, Somerset BKA

In Response

The appropriate strength of an oxalic acid solution is a difficult question as there is so much advice. As a general rule the further south you are the stronger the solution and the further north the weaker. In Italy it is common to find a 6% solution used which would be considered too strong in Great Britain or Ireland, while in Scandinavia 3% would be suitable. This is probably why the

NBU has bracketed the strength to cover most situations. Many beekeepers make up their own solutions and many recipes are recommended. The mixture suggested within the 'In the Apiary' article is that recommended in the New Zealand MAF 'Control of Varroa' book, which is internationally accepted as a very good guide. Of course preparing a solution of oxalic acid is not without risk as breathing the very fine particles can damage human lungs so my recommendation is to buy a known prepared product. At the current time this would be 'Oxovar' as it is registered for use in at least one EU state so is therefore of a known efficacy and safety.'

Pinguis Imperium

Winter Use of Apiguard

I have a comment regarding In the Apiary, BBKA News October 2011 where Pinguis Imperium states 'If you do not wish to use oxalic acid a single tray of Apiguard applied to the colony over the winter and kept on until empty or two weeks before putting supers on, can be effective. Though not necessarily recommended by the manufacturer ...'

I would like to comment that this is in direct contravention to the manufacturers instructions not just 'not recommended'. We are all advised that should we need to use chemical treatments, whether derived from organic compounds or not that we use them in strict accordance with the manufacturers' instructions. BBKA News and other publications stress this in almost every issue and this article contravenes all the advice usually given. The instructions also state that the treatment requires a certain temperature to be effective. I assume this is relying on the colony to

maintain a high enough temperature for their survival, which is higher than that required for the treatment to be effective.

Diane Sleight, West Wilts BKA

In Reponse

Your correspondent is absolutely correct that winter treatments with 'Apiguard' are not mentioned in the instruction sheet. Apiguard has been an approved bee medicine for some years now and since its registration I am aware that research projects have been carried out to evaluate the effectiveness of winter use. It is now generally accepted that such treatments are both feasible and effective though data from these projects

have not yet been put into the public domain for commercial reasons. It is also currently time-consuming and expensive for manufacturers to change instruction sheets to include developments in a product's use. Later use such as a spring treatment may have adverse effects to a colony by causing the queen to go off lay thus slowing colony development. Information about the use of 'Apiguard' can be found at www.vita-europe.com.

Pinguis Imperium

An Interesting Winter Feed!

While pressing my cider apples this autumn I found that many wasps and hornets were attracted to the apple juice, so I put some of the juice in a feeder over one of my hives and the bees took it down. The weather this October and November has been very mild and the bees have been active bringing in pollen, so I think they have been using the juice to feed more brood. I will be interested to see how they fare over winter, but would welcome advice from any experts on whether pure apple juice could cause problems later. Could they convert any surplus juice into honey? Perhaps I should pasteurize some and save it till spring, then any surplus 'apple honey' could be guaranteed pollen free, meaning that I need not change my labels under the latest daft ECJ ruling!!

Joe Bleasdale, Somerset BKA

Diary of Events 2012

18 February. Somerset BKA Lecture Day at Kings of Wessex Academy, Cheddar. Dr Jim Tew, Graham Royle, NDB, Dr Gay Marris, Nic Charlton B.Sc. Details from Caroline Butter 01934 742075 E-mail: okapi.bhive@uwclub.net

25 February. Holsworthy Branch of Devon BKA — Spring Convention. Speakers include Adam Ververs, Dr Michael Keith-Lucas, Dr Juliet Osborne, Bill Summers (Zest hive). Website www.holsworthybeepers.org.uk or 01409 250230.

3 March. Bucks County Beekeepers 16th annual seminar. Not just beekeeping. Info: 01494 726616; richard.catton1@ntlworld.com.

17 March. A training event for association committee members at York College, York. Free event. Information from Bill Cadmore. bill.cadmore@ntlworld.com or tel: 0113 216 0482.

31 March. LBKA, Lincoln District. Sale of Bees and Equipment. From 11am, County Showground, Scampton, Lincoln. Details from: Alan Campion 01522 522679; Bill & Jenny Williams 01522 730365 or Jonathan Korejko 01526 378222.

31 March. North East Beekeeping Convention. Great North (Hancock) Museum, Newcastle 9am–5.30pm. Speakers: Professor Francis Ratnieks, Tony Jefferson and Dr. Jeri Wright. Information and Application Forms from www.nebees.org.

20–22 April. BBKA Spring Convention 2012 at Harper Adams University College Campus, Newport, Shropshire.

28–29 April. Southport & Formby Beekeepers. Two-day introduction to beekeeping course, £100. Merchant Taylors' Boys' School, Crosby, Liverpool L23 0QP. Details: julie285@gmail.com.

High Density 6 Frame Polystyrene Nuc Hive

Only **£29.50**



**Plus Full Range Of Wooden Hives, Tools,
Clothing & Other Equipment Available**

Poly National Hives Now Available

Lightweight, Durable & Cost Effective
Polystyrene Hives

Complete National hive



Includes:
Open Mesh Floor
Brood Box
Queen Excluder
2 Supers
Crownboard
Roof

£94.99

Full range of National hive parts available
**Compatible with existing
Wooden National hive parts**



www.paynes-beefarm.com

Tel. 01273 843388

Wickham Hill, Hassocks,
West Sussex, BN6 9NP



Are you looking to expand in the Spring? Looking to replace your Winter losses?

Visit iwantbees.co.uk for Queens, Nucs
and Full Colonies of the highest quality
reared and cared for by our dedicated team of professional beekeepers.



Bees in our poly nuc hive, complete
with 6 Frames, all stages of Brood, plenty of
stores, with a choice of either
local bred or New Zealand Queen

£195



IWantBees.co.uk

For our complete range





Follow us on Twitter @thornebeehives

E.H.THORNE (Beehives) **LTD**

Manufacturers of Beehives and Beekeeping Equipment Since 1913

Follow us on Facebook www.facebook.com/ehthorne

THE HEDGECOE HIVE

Made from waterproof and marine ply
Each hive comprises:

- Empty 14" x 12" Brood Body with top bee space
- Insulated cover
- Mesh try floor
- Four easily removable legs
- Two empty BS Supers with top bee space
- Wet and Dry feeders
- Simple sloping roof
- Half Brood Body
- Accessory Box

£240



For more information visit our website

E.H.THORNE (Beehives) **LTD**

BEEHIVE BUSINESS PARK, RAND, Nr. WRAGBY, LINCS, LN8 5NJ
TEL. 01673 858555 FAX. 01673 857004
sales@thorne.co.uk www.thorne.co.uk

