



Bath BEEkeepers NEWSLETTER



ISSUE 2
FEBRUARY 2024

Bee mine.
I've pollen for you.



HELLO AND WELCOME



We are starting to see some snowdrops and hazel catkins opening up in our gardens and hedgerows. If the weather gives us some warmer, drier days our bees will start thinking about popping their heads out of the hives but this activity will still be limited. This gives us some time to think about and plan for what we need to do for the year ahead. The committee are looking at what activities we can start putting into place for the coming season and these will start to appear in the "Dates for your Diaries" below but also watch out for emails coming out. **And, please remember to renew your memberships if you've not already done.**

CLUB NEWS - VARROA -TO TREAT OR NOT TO TREAT?



Varroa destructor is a tiny red-brown external parasite of honey bees.

Although Varroa mites can feed and live on adult honey bees, they mainly feed and reproduce on larvae and pupae in the developing brood, causing malformation and weakening of the honey bee as well as transmitting numerous viruses.

Colony symptoms include:

- ◆ an abnormal brood pattern,
- ◆ sunken and chewed capping's and
- ◆ larvae slumped in the bottom or side of the cell.

This ultimately causes a reduction in the honey bee population, supersedure of the queen bee and eventual colony breakdown and death. The life expectancy of infested honey bees is shortened by Varroa mites, creating a serious problem for winter bees that must survive until spring when the honey bee populations normally increase.

Viruses: Severe infestations of varroa may lead to:

- ◆ deformed wings which are shrivelled and adopt a 'spaghetti' like appearance;
 - ◆ stunted abdomens;
 - ◆ general weakening of the colony;
 - ◆ Patchy / pepper pot brood patterns; and
 - ◆ colony loss.
- ◆ *sacbrood bee Virus*
See [National Bee unit](#) for more varroa information.

In December Alison Holman organised a talk given by Professor Stephen Martin who has been doing research on Varroa for the last 40 years. He has made the interesting Discovery that bees are adapting their behaviour because they are able to recog-

nise that a cell has been invaded by varroa due the smell of ketones given off by the mite's offspring. The bees will open up the lid of the infested cell. Then one of two things happen:

- Remover bees will open the lid of the sealed cell and remove the bee pupa. The mother mite will then leave the cell and her offspring will die. This lowers the burden of mites in the hive. Or,
- Capper bees will seal up the cell again if nothing further is detected. More bald brood will be seen on the comb (open cells with larvae in them) - which is a good sign and evidence that bees

have been seeking varroa mites.

As far as treatment is concerned Stephen thinks we are over treating our bees for varroa and suggests:

- ◆ that while we do not stop treating for varroa we could try halving our treatments. Or,
- ◆ just use icing sugar on the comb when inspecting.

But if you choose reduce treatment this way you *must* increase your monitoring as you need to know what is going on in the hive and adjust your treatment accordingly. Whether you aspire to go treatment free or - cont. on P2

CLUB NEWS AND ACTIVITIES

Vacancies: We need your help!

The Club needs a new Treasurer.

We need someone to take over this role and become a member of the committee. You'll get a good handover and support from all the committee members, please contact Charlotte or Shaun at bath-bka.sec@gmail.com



Gardening Volunteers



Volunteers are required on Sunday the 11th and the 25th Feb at 1000 for gardening at the Teaching Apiary. Just turn up on the day and give what time you can. If you can, please bring along hedge cutting gear as this would assist greatly.

If it's raining we'll be inside making frames. If anyone has any spare National Top bars to donate that would be appreciated, we need about 50.

Dates for Diaries:

Now	Renew Membership
24 Feb	Beekeeping Show, Telford International
6 April	Avon Spring Convention
April 9; 16;25;3	Basic (Improvers) course.
12-14 April	BBKA Spring Convention
May 24	Basic (Improvers) Practical TBC

VARROA—TO TREAT OR NOT TO TREAT?

want to pursue various Varroa mite treatment methods you must plan. Being treatment free involves knowledge of both the bee and the varroa's reproductive cycle.

The Varroa mite life cycle consists of the following stages:

- Adult female Varroa mites enter brood cells (especially drone brood) at the pre-capping stage and lay two to five eggs after the brood cell is capped.
- 0.5 mm long eggs are laid on the bottom of the cells, on the walls, and sometimes directly on the larvae.
- The first egg laid is a male, and subsequent eggs are female
- After hatching Varroa mites pass through two larval stages before developing into an adult. It takes about 5–6 days for male Varroa and 7–8

days for female Varroa mites to develop.

- Mating occurs in the brood cell. The male Varroa mite dies inside the cell shortly afterwards.

- Young female Varroa mites and the mother Varroa mites emerge from the brood cell with the emerging honey bee.

The daughter Varroa mites lay eggs in other brood cells after 2 weeks. Adult female Varroa mites usually live for 2 months but can overwinter.

Treatments:

In order to keep healthy and productive colonies,



Varroa mites must be controlled.

Treatments fall into one of two categories with each having their pros and cons, you need to choose appropriate controls to suit your methods of beekeeping.

Biotechnical Controls:

These avoid using chemicals, utilising methods based on good bee husbandry to reduce mite populations by physical means alone. They exploit the fact that Varroa mites reproduce in the brood. The most common control includes trapping mites in comb (usually drone) which is then cut out and destroyed, along with the mites within

the cells. Generally, these methods are only used during the spring and summer months when drone brood is being reared.

Varroacides: An important feature in beekeepers control plans. They are highly effective at killing and controlling Varroa mite populations.

There are two types: Those that contain synthesised proprietary chemicals and those that contain synthesised chemicals which are naturally occurring e.g. formic acid or essential oils.

When using any treatments it is important that you read and follow the label instructions and only use medicines that are approved under law.

Information about products that are authorised for use in the UK is [available on the Medicines page](#) of the [Bee-Base website](#).

ASIAN HORNET—WHAT ELSE?

Where does the AH “Hang Out?”

You may come across an Asian hornet at any time but it is worth remembering you are more likely to see them around beehives or on certain types of plant native to Asia (such as Fatsia japonica or Camelia), although you can see them away from these too.

Action: *If it is safe to do so, you should always try and take a clear photo of an insect you suspect is an Asian hornet and report.*

Commercial baits:

These are effective and can be purchased easily. For club verifiers commercial lure/bait will be available to go into the traps that have been provided. Speak to Jeremy Huckle if needed and if you would like to be a verifier.

Sweet baits:

These are highly attractive to capture foraging Asian hornet queens in early spring. This is because queens emerging from hibernation have a raised energy requirement and show a preference for sweet foods.

There are many variations of effective sugar baits. These include mixes of sugar and various types of dark beer or alcohol and even fruit juice baits for example apple juice.

French beekeepers advise mixtures of dark beer, 25ml of strawberry dessert sauce and 25ml of orange liqueur are effective.

Asian hornets have also been discovered feeding on windfall and ripe fruit which can also

be used as bait.

During the summer the predatory worker hornets seek high protein foods to feed the larvae.

Protein baits:

To make a protein bait dilute raw meat or fish with water.

The National Bee Unit use a protein bait of mashed fish e.g. prawns/trout diluted to 25%.

Be aware, if you use a protein bait it will need changing after 3 days due to decay and an unpleasant aroma.

ASIAN HORNET -REPORT IT

Report it!



Courtesy The Animal and Plant Health Agency (APHA), Crown Copyright.

We still need club AH verifiers—Act now take the AH Team Exercise @ BBKA <https://www.bbka.org.uk/asian-hornet-action-team-map>



THIS MONTH IN THE HIVE - FEBRUARY 2024

In February the weather can still be cold but there may be some milder days when your bees can venture out. Your bees might start bringing in some pollen from forage in your local area. They might find some snow drops, daffodils or dandelions which are a good source of pollen and nectar. If the fondant is untouched, it confirms there is likely adequate honey reserves in your hives. If you have no fondant on the crown board, have a peep to check if bees are present. If they are, it is time to add more feed!

During February:

- ◆ Continue monitoring your hive entrance for build up of dead bees and blockages.
- ◆ Gently heft (lift) the hive checking food weight, if light add fondant over the feedhole but don't open the hive.
- ◆ Undertake varroa Count, planning treatment as necessary.
- ◆ Remember to record your observations for each

hive in a book or record sheet.

- ◆ Days are getting longer so it's worth trimming back weeds, bushes, etc. to tidy your apiary area.
- ◆ Order any equipment you might need for the coming year & start making new frames in preparation.
- ◆ Watchout for Woodpeckers if in your area.
- ◆ Continue studying for the March BBKA exams

QUESTIONS & ANSWERS?

Q: When is the best time to replace rather old, ragged brood frames?

A: In the spring, once warm enough to open hives (14-15degrees C). If they have no brood on remove them. You can either drop a new frame in its place , or bunch the older ones up to fill the void you created and put the new ones further out. This should ideally coincide with giving them some spring syrup so

they have the resources to pull new wax. Brood frames should be replaced every 3 years or so, before they become too black and grubby.

The 1st frame removed for inspection can be put back at the other end of the box each time, meaning that over the season every frame has been through the brood section, otherwise you may find the outer frames never get touched.

Fondant Supplies:



Fondant available from Pete Davis at £25 per box of five x 2.5 kg packs.



If you have any stories, photos, info or questions that you'd like included in the newsletter please email to:

alison.hillman@btinter-net.com

by 20th each month



Ingredients:

150g butter
100g caster sugar
50g honey
Finely grated zest of 1 lemon
2 medium eggs, beaten
150g self raising flour
3 tbsp lemon juice

To Decorate:

50g butter
115g icing sugar
25g low fat soft cheese
1tbsp honey
1 tsp finely grated lemon zest

Method:

Step 1: Preheat oven to 190C/ Fan 170C / Gas Mark 5
Step 2: Beat butter, sugar & honey together until pale & creamy.

Step 3: Then beat in lemon zest.

Step 4: Gradually add the eggs beating well between each addition.

Step 5: sift in the flour & fold in gently until well combined, then stir in the lemon juice.

Step 6: Divided mixture between cup cases/bun tin.

Step 7: Bake on middle shelf for 15—20 mins.

To Make Frosting:

Step 1: Beat butter until smooth.

Step 2: Gradually add the icing sugar beating well to combine at each addition.

Step 3: Beat in low fat soft cream cheese, honey and lemon zest.

Step 4: Pipe or spread on cakes, then decorate to suit.

Use marzipan to make the bees, almond flakes for the wings & black cake covering for the decoration.

RECIPE OF THE MONTH - LEMON & HONEY CUPCAKES