



Issue No: 148

Oct – Nov 2022

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**Swansea and District Beekeepers
Newsletter**

Gwenynwyr Abertawe

a'r Cylch

Cylchlythyr



Bees in winter

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October – November 2022

Hello and welcome to the 148th edition. Croeso i'r cylchlythyr hyn, rhif 148fed

It's the time of year to check the hives, stores and close colonies up for the winter season.

This summer has been very good, the honey flow excellent, all areas reporting reasonable yields of honey despite the extreme heat.



The British Beekeepers' Association celebrated the first **National Honey Day on Friday 21st October 2022**. BBKA encouraged everyone to share the day by buying a jar of local honey day produced by bees here in the UK. The BBKA are also running a new petition calling on the Government to revisit the intended change in labelling of honey sold in the UK. This can be signed at <https://www.bbka.org.uk/bbka-national-honey-day>



The **91st National Honey Show** was held on October 27th to 29th 2022. Congratulations to Karen Squires, our society treasurer, who won First prize

Class 39: One Frame of Honey suitable for extraction

1st	Miss Karen Squires	VHC	Mr Brahim Meraga
2nd	Mr James Cooper	HC	Mr John Roberts
3rd	Mrs Rebecca Champion	C	Miss Kt Brewster

<https://www.honeyshow.co.uk/>



Honey fraud is currently a hot topic, highlighted by the dedicated work of the Honey Authenticity Network.

<https://www.honeyap.org/>



A talk given by Lynne Ingram, The Truth about Honey, at the WBKA Conference in March 2022 at Builth Wells was one of the most informative talks I have attended for a long time. I was shocked by the amount of fraud taking place. The other day I even found a recipe for 'Vegan Honey' made with apple juice...how can this be called HONEY!

The WBKA held a webinar on Mon, Oct 31, 2022. Honey fraud is the 3rd biggest food fraud in the world. This talk lifts the lid on the how, why and wherefore of honey fraud and adulteration, and the way it impacts on the livelihoods of beekeepers around the world. If you get a chance to listen to Lynne, it's well worth it!

<https://wbka.com/wbka-webinars/>

Seasonal techniques of beekeeping.

Preparing for winter. – by Mandy

With the inevitable changing of the season comes the wind, rain and snow! Preparing for the winter starts after the honey stores are removed leaving enough frames for the bees. End of August into the end of September is usually the time to reduce the colony to brood or brood and a half. Aim to get a good strong colony to cope through the winter.

Checks to do –

- **Remove queen excluders** – leaving the queen excluder under a super for winter could trap the queen when the bees cluster especially when they migrate upwards, this could lead to colony loss, bees will starve in a cluster protecting her rather than go through it for fresh stores.
- **Strong colony** – between August and November the queen will start to lay eggs that will develop into winter bees, by the end of November they will all be winter bees. These will take the colony through to spring and are sometimes called **diutinus** bees from the Latin for ‘long lived’, up to six months. The winter worker bees are physically distinct because of the enlarged fat bodies. This has a special function of producing large amounts of a protein called *vitellogenin*. This egg-yolk like protein is added to brood food which enables bees to live longer.
- **Boxes** – check boxes and change any that show signs of damp as this could be detrimental, bees have adapted to cope with the cold, but damp will chill and kill a colony. Tip the hive forward to allow any moisture to drain out, a couple of wood wedges or slate under the back corners is sufficient.
- **Insulation** – foam insulation tucked inside an eke above the super with space cut out for access to fondant receptacle. If bees are too warm, they will be active and move more, wasting energy and food. It’s getting the balance right.
- **Entrance** - remove the entrance and fit mouseguards. This prevents mice getting into the hive when the bees cluster, mice will make a mess spreading excreta and making holes in the foundation. Also in cold weather when bees cluster, they don’t remove the dead bees from the hive, these could build up on the floor and block the entrance if it’s quite small, stopping the live bees getting out.
- **Stores** – ensure super is full of honey with access to fit fondant feed in plastic containers over the cover board holes, when feeding is required.
- **Strap down hives** – high winds can cause problems in exposed positions. Polyhives should have the roof and hive bodies strapped together and preferably to the stand. Wooden hives may need a hefty weight on top to keep the roof in place or a storm strap.
- Leave an eke above the crown board to contain fondant and a feeder for spring

Tip: Putting the Varroa board in on occasions during the winter can give you an idea where the cluster is from the pattern of the debris on the board.



Cyclone preparation for beekeepers in FIJI!!! From online site

Preparing for winter [cont]

Feeding bees. – by Mandy

Depending on the forage available some bees may need feeding as early as end of September. The weather seasons are changing, it's been so dry throughout the summer that the nectar flow has been affected, there seems to be only pollen available now.

Initially bees need syrup when there is a lack of nectar, a sugar solution of 2:1 sugar/water solution, until the end of September. Once the colony numbers decrease, they will not take it down into the hive as they will not be able to reduce the water content of the syrup. It's at this time the inverted sugar or Ambrosia is recommended until end of October.

Fondant is a deliquescent, a solid that can become liquid, therefore able to absorb water from the air and dissolve it. This helps to reduce the atmospheric moisture in the hive. As a rule of thumb, a 2.5kg pack will last about 6 weeks when the colony is brood less, and about 4 weeks once they start raising brood after the winter solstice. When they start consuming the fondant keep a weekly eye on them.

AMBROSIA - group purchase – from David O'Carroll

The Gower Honey Cooperative is organising a group purchase of Ambrosia syrup, a bee feed that can be given to bees throughout the year. It is available in 12.5kg jerry cans. It is convenient and readily taken up by bees when they are active and a lot easier to use than making up sugar syrup.

By making a group purchase beekeepers can avoid the eye-watering prices of the national retailers and the transport costs. If you join the group purchase, you must be a member of the Gower Honey Cooperative (membership is £1 for the year to 31 March 2023). Costs are 1 can @ £19; 3 cans for £55; 5 cans for £90 [5 cans or more @ £18 each]. The costs are based on you picking up your supplies from Landimore on Gower (SA3).

If you wish to join the group order, please email David O'Carroll on david@gowerhoney.co.uk For further details about the cooperative, website <http://gowerhoney.co.uk>

Treating for varroa.

Research by Dr. Samuel Ramsey shows that varroa mites feed on the fat body of the honeybee. It is a major problem as bees parasitized by varroa are weakened and will reduce the ability of the colony to make it through the winter months. Varroa levels need to be checked September to ensure low levels of mite population. If levels are high, treatment should commence immediately, and appropriate records kept of batch numbers and treatments given.

Below is the title of the you tube video of Dr Samuel Ramsey's presentation on varroa. It is over an hour long but well worth watching –

Dr Samuel Ramsey presents 'Varroa feed on haemolymph'

<https://www.youtube.com/watch?v=z2pL5NIRcw>

There is also a good article on varroa and the various treatments available at this website by Simon the beekeeper

<https://www.simonthebeekeeper.co.uk/blog/varroa-mites-and-how-to-treat-them-n5>

Apiary news – Apiary Manager – Martin Davies

Notes from the committee meeting Tuesday, October 18th, 2022.

The apiary site at Llys Nini is doing well.

There are eight colonies.

One of the hives was riddled with wax moth and two swarms had settled in the stored frames!



This is not the hive from the apiary but to illustrate the effects of wax moth infestation



Greater wax moth tunnelling through the honeycomb

Plastic recycling by wax moths made news in 2017 and this year Spanish researchers have discovered two key enzymes in the wax moth saliva that could overcome a bottleneck (oxidation) in the degradation of polyethylene.
tinyurl.com/BC2022-11-02



From Bee Craft p5 Nov 2022

There is also an article by National Geographic magazine on wax worms eating plastic, printed in April 2017. Could this be a solution for the plastic pollution??

<https://www.nationalgeographic.com/science/article/wax-worms-eat-plastic-polyethylene-trash-pollution-cleanup>

The Society Apiary is now closed for the winter, all hives have been checked for sufficient stores and, provide that they survive the winter, we will re-open the site to members in the spring. Hopefully we will get a few more attendees than this year, which has been affected by the apiary move and change in apiary management.

Education/courses

Study group for Bee Health Certificate – from David O'Carroll

As we snuggle up inside in the ever-darkening evenings why not turn your mind to learning more about beekeeping. For those who have already completed their Beekeeping Basic Assessment the next step is to study best practice in the apiary. The Welsh Beekeeping Association encourages us to follow the learning arrangements of the BBKS and you can see the link to the "syllabus" here: https://wbka.com/wp-content/uploads/2022/01/Honey_Bee_Health_Syllabus.pdf

As there is no training course to prepare for the *Bee Health Certificate* assessment, Sue and I thought it would be helpful to set up a study group which would motivate us to read up on the subject or watch videos on bee health during the winter and encourage us to take the practical assessment during the next beekeeping season.

Our idea is that we should agree a topic to study each month and then have a meeting to discuss what we have learned.

Anyone interested in joining the study group should contact Sue or David [emails]

David

Gower Honey Cooperative

Thank you. David, for this information, I am sure it will prove popular for preparation for the Bee Health Cert. Mandy

Honeybee Health Certificate

A practical assessment suitable for members who wish to advance beyond their Basic Assessment

A new assessment available from 2018 to help beekeepers who have already passed their Basic Assessment acquire some of the skills needed at the General Husbandry level.

Aims

To encourage beekeepers who have been awarded the BBKA Basic Certificate and have at least three years of beekeeping experience to improve their understanding and practice of beekeeping.

The Candidate will be able to demonstrate a range of beekeeping skills.

Application

To apply for the assessment, please contact your local Exam Secretary. They will be able to email you a link to the application form. You can use this to apply and pay online. You will get a receipt by email to confirm we have your application. If you are not sure how to contact your local exam secretary then check with your local association. Independent members can contact the BBKA office to receive their application link form by email.

The BBKA Examination Secretary will contact you with the assessment details.

Information copied from BBKA website****

Education/courses - continued

Late email from Welsh Beekeepers Association Courses:-

From: Jenny Shaw <noreply@membershipservices.org.uk>

Sent: 05 November 2022 18:47

To: Martin Davies <sdbks.secretary@gmail.com>

Subject: WBKA Courses

To WBKA Association Secretaries, Council Representatives, Officers and Trustees

Please circulate the message below to your members.

If you have your own dissecting (stereo) microscope, there is one place remaining on this one-day anatomy and dissection workshop being held on 3 December in Newtown.

<https://www.eventbrite.co.uk/e/415530331407>

The next WBKA sponsored General Husbandry Preparation course will begin with 2 days of theory over the weekend of 25 & 26 February 2023. For further details and to book, please use the link below.

<https://www.eventbrite.co.uk/e/449216276977>

Both of these events, which are subsidised by the WBKA supported by funding from The Worshipful Company of Wax Chandlers, represent excellent value for high quality, expert tuition.



There have been confirmed sightings of the Asian hornet in the UK during the last few months

September 2022

Asian hornet (*Vespa velutina*) confirmed in the Rayleigh area of Essex

A local Asian Hornet Team member in the Rayleigh area of Essex captured three hornets and reported this using the Asian Hornet Watch app. National Bee Unit inspectors were dispatched to the location to carry out enhanced surveillance and the insects were confirmed as Asian hornet.

An Asian hornet nest in a sycamore tree was located and destroyed in the Rayleigh area of Essex on Friday the 30th September and removed the following day. Monitoring will continue in the area supported by local beekeepers.

‘Asian hornet nest in Rayleigh removed from back garden for tests

The nest was found six metres up a sycamore tree in David Holborn's back garden in Rayleigh

A nest, the size of an "elongated basketball", has been removed from a back garden after a week-long search operation.

Beekeepers were warned to be vigilant, after three of the insects were spotted in Rayleigh.



Inspectors from the Animal and Plant Health Agency (APHA) found the nest six metres up a tree, after knocking on a resident's door in the Essex town.

The destroyed nest has been taken to a government laboratory for testing. David Holborn, whose garden the nest was found in, said the inspectors arrived in "jeans and jumpers" and "suited up" after spotting the nest.

Thursday 6 October 2022

A member of the public took a photo of an Asian hornet in Dover which has been confirmed by the National Bee Unit.

Bee Inspectors are now carrying out enhanced surveillance in the town.

They are warning both beekeepers and the public to be vigilant around ivy, which is fully in flower, as Asian hornets are particularly drawn to this plant.



There have been 2 confirmed sightings of Asian hornet in the UK in 2022.

A total of 23 confirmed sightings of Asian hornet since 2016. This figure includes a total of 13 nests, all of which were destroyed.

<https://www.gov.uk/government/publications/asian-hornet-uk-sightings/asian-hornet-sightings-2020>

Science and health of bees

JUNE 1, 2022

New virus variant threatens the health of bees worldwide

by Martin-Luther-Universität Halle-Wittenberg




A dangerous variant of the deformed wing virus is on the rise worldwide. The virus infects honeybees, causing their wings to atrophy and the animals to die. The new variant, which has already replaced the original strain of the virus in Europe, is spreading to other regions of the world and causing entire bee colonies to collapse. This has been shown in a study by an international research team led by Martin Luther University Halle-Wittenberg (MLU), which analysed data on the spread of virus variants over the past 20 years. The paper appeared in

the *International Journal for Parasitology: Parasites and Wildlife*.

<https://phys.org/news/2022-06-virus-variant-threatens-health-bees.html>

Unlocking the DNA secrets of local honey bees



A study of the genetic variation of bees across Devon is underway. Devon beekeepers have been asked to send a sample of one single worker bee so that it can be genotyped by Beebytes at the Roslin Innovation Centre. The aim is to establish a baseline for the genetic make up of honey bees across the county and to inform efforts to improve local bee populations.

In parallel but independent work, Purdue University in Indiana is sampling locally raised honey bees across the USA to quantify their genetic diversity.

The honey bee genome was first sequenced in 2006 and substantially improved since then. With new technologies and techniques, low-cost genotyping assays are now feasible. As can be seen, for example, in the Game of Drones pilot research on the Isles of Scilly (page 7), the technology opens up new ways of understanding bees.

From Bee Craft p 4 November 2022



a society in a box

Honeybee's life

Illustration by a friend of mine in Lubbock, Texas. Original done for a 2007 beekeeping contest. Thanks to my committee and organizers.

Why 3 bees?

Queen
 1 Queen Bee
 1 Drone Bee
 2 Worker Bees

Drone
 1 Drone Bee
 1 Queen Bee
 2 Worker Bees

Worker
 1 Queen Bee
 1 Drone Bee
 2 Worker Bees



What are they doing?

Queen
 Lays eggs
 Feeds larvae
 Oversees the colony

Drone
 Mates with the queen
 Guards the entrance

Worker
 Builds the hive
 Feeds the young
 Cleans the hive



Developmental stages of a honeybee. The timeline shows the progression from egg to adult, with key milestones marked.

Producing royal jelly

Royal jelly is produced by young workers and used to feed the larvae when they are very young.

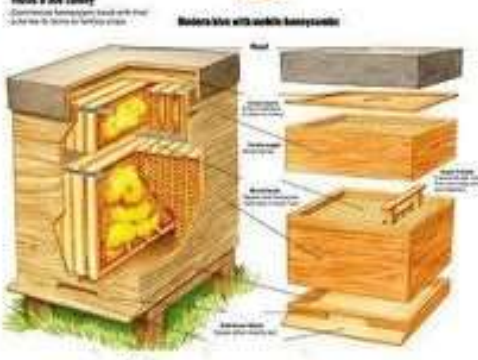
Royal jelly is a clear liquid, rich in water, sugars, proteins and vitamins.



Propolis

Propolis is a sticky substance that bees use to seal holes in the hive. It is made from tree resin and beeswax.

Propolis is a sticky substance, dark and very sticky, which bees use to seal holes in the hive. It is made from tree resin and beeswax.



Spotted this on World Beekeeping Awards on Facebook..isnt it brilliant!!

Articles of interest

To the Rescue! – by Martin Davies

Some of you are aware that I am now working part-time as the beekeeper at the National Botanical Garden of Wales. There they have 22 colonies and all proceeds from honey and hive products get ploughed back into the bees and other pollinators.

Whilst at work there I was approached by one of the horticulture volunteers, as her brother had some bees in his roof that needed rescuing, she thought it might be good to talk to someone about them and was pointed in my direction. Now, dealing with bees in roof spaces can be problematic and often involve extensive work to get access, as those members that have done it will know. However, after seeing the photograph she produced on her phone I was intrigued by their location.

The bees were located under a porch roof in a lovely cottage near Llannon, not far from us in Llanelli, so I agreed to at least take a look at the situation and see if anything could be done to safely remove the bees.

On arrival I was greeted by the owner, Gordon, and taken to where the bees were located. As you can see from the photograph below it was a rather unusual place to form a colony and probably survived the summer and early autumn purely due to the sheltered nature of their location.



As can be seen, the bees were not exactly in a roof space, but between the rafters in a simply constructed porch roof.

I came prepared with a poly-nuc and empty frames, so carefully cut away the honeycomb from the wooden roof sections and, using elastic bands, secured it into empty brood and super frames that I had also brought. The bees themselves were quite calm, despite me wrecking their entire home, and piece by piece the colony was transferred to their new home. An additional Super box was added which contained drawn foundation frames and stores.

They were then left overnight, with the queen excluder in place at the nuc entrance, to be collected the next morning. On my return the next day there were a few stragglers left at the original location, no doubt confused and still attracted by the remnants of the beeswax and queen pheromone, and these were swiftly caught and transferred to the nuc, which was then relocated to our apiary at the end of our garden in Llanelli.

As the wild honeycomb was so large it was not possible to fit all of the removed sections into the empty frames, sadly, some of the sealed honeycomb had to be sacrificed and this went back to Gordon, who was very appreciative.

As for the bees, well I didn't find the queen during the transfer, but inspection of the colony one-week later showed that there were eggs present and the bees didn't seem too unhappy with their new home. Careful nurturing through the winter should see a nice addition to our colonies with what appears to be a nice temper queen. A good result with both the bees and house owner happy.

Martin Davies

‘When bees were bees’ by Tom Davies

I have learned something about our craft today, while on the hunt for material I came across information that surprised me.

In a beekeepers’ supplies list I have, dated 1926, published by R. Steele and Brodie, of Wormit, Fife, I have found the following facts regarding hive frames, brood boxes and foundation.



I was under the impression that the national deeper brood chamber 14x12 was a rather modern expansion, but not so, as the 14x12's were listed for sale in the 1926 lists, as well as the 16x10 commercial hive.

A fascinating list going through all things necessary that any beekeeper would need to become adept in the craft.

A good many hives were listed for sale, the American Langstroth and the Dadant, and the recent invention of that time was a crimped wired type of foundation (sometimes referred to as weed)*** that looked to be quite an asset towards getting well drawn-out combs. Some 12 British hives were on sale, plenty of choices around.



*** NB In 1895. Detroit inventor Edward Weed invented rollers that can make wax foundation in a continuous roll. There is a good account of making foundation wax

Thornes website and Wikipedia.

https://en.wikipedia.org/wiki/Wax_foundation

Bees were also for sale, from queens to swarms, e.g a six comb stock in May- native bees = 60 shillings, but this quote took my interest –

‘a swarm (fully 30lbs) of the ‘le Gatinais’, non-swarmer strain of bees – 42/6d carriage paid.’ (about £2.12p.....I think!!)

Into October now and the wind has quite a chilly feel to it, time to tidy things up and get ready for winter. In my bee garden the dahlias, tagetes, and Michaelmas daisies are having a last flowering spell before dying off and attracting a good many types of bees and hoverflies.

This year, in spite of the spell of very hot weather, has turned out very well in terms of soft fruit, beans, and a reasonable amount of potatoes. On top of the good amount of blackcurrants and gooseberries in my freezer, I’ve been getting good crops of blackberries, in fact the best show of blackberries for a good many years.

The hot spell produced a surge in blackberry flowers, and I should imagine that would have had a beneficial effect wherever the heat dried up the clover patches, next year’s show benches should have some interesting exhibits.

My tomato crops suffered from the heat as it’s in a corner which is a bit of a frost trap in winter, and like an oven in a hot spell, making the skins of the tomatoes hard and liable to splitting, so those that split were boiled up and strained off the skins for freezing in small containers, plus have had quite a lot that were used as fried tomatoes on toast, one of my favourite meals! On that. I hope you all have good crops of honey. Tom Davies.

Thank you Mr Davies for such a wonderful dip into the history of beekeeping and providing me with useful magazines for future reference. Diolch yn fawr.

Diary dates/events

Diary dates - Social evenings 2nd Tuesday of month at New Lodge Club, Gorseinon.

2022

October

27th – 29th Oct 91st National Honey Show, Sandown Park Racecourse, Esher, Surrey, KT10 9AJ

Website contains video lectures and talks from previous years, full of interesting information.
www.honeyshow.co.uk

November

15th Tues - SDBKA Social evening

Winter Fair - Mon 28th – Tues 29th November at Royal Welsh Showground, Builth Wells.

2023

January - Talk by Jeff Dulong on the Beekeeping Year – date to be confirmed

February – SDBKS AGM – date to be confirmed.

March – WBKA Conference Sat 25th March 2023 at the Royal Welsh Showground, Llanelwedd.

April – BBKA Spring Convention 21-23 April 2023 at Harper Adams University, Shropshire, TF10 8NB

Webinars available on WBKA website - free and accessible to all via

<https://wbka.com/wbka-webinars>

Bee Inspectors

Regional bee Inspector - Margaret Gill margaret.gill@apha.gov.uk Mobile No: 07979 119373

Local Bee Inspector - George Tonge george.tonge@apha.gov.uk Mobile No: 07769 643138

Articles for inclusion to sdbks.editor@gmail.com

Diolch yn fawr/Thank you.

Mandy

Wishing everyone a safe, healthy and happy Christmas and a prosperous New Year

Nadolig llawen a blwyddyn newydd dda



Ideas for next issue

- **how are bees affected by climate change?**
- **Apitherapy?**
- **Jobs for the winter – checking equipment, teaching the bees to read?**
- **Preparing for spring**
- **Please send in your experiences, ideas etc.**