

Swansea & District Beekeepers Newsletter Gwenynwyr Abertawe a'r Cylch

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Editor: D. Salkilld

Spring Inspections by David Salkilld

Now is the time to think about the spring inspections on your bees. Maybe, if the weather has been good, you've already have done these, but if you haven't, now is a very good time.

In these inspections I like to do several things: make sure the queen is laying, put new foundation in the brood chamber, clean up any brace comb, change the floor, mark the queen if necessary and, perhaps, feed them.

The important question is 'When do I do the spring inspection'. Everybody has a different answer but, in my book, it is when I can safely open the hive without chilling the brood, i.e. when the temperature is up above about 12 or 14°C. As a rule of thumb, that is when I can go to the apiary in shirt sleeves, though I do wear full protection at the hives. Dependent on our somewhat vague climate, this is usually from early March onwards, though in some years, it has been nearer to April.

As for the queen laying, previous observation at the hive entrance should have told you if everything was OK or not. When a hive is queenright and she is laying in spring, you will see the workers flying with purpose, bringing pollen back to the hive. Now these pollen sacks may be small, dependent on what is available in their foraging area, but they will have been doing this whenever the temperature is above about 8°C, though I have seen them flying at lower temperatures.

Inside the hive there should be several frames with brood. Dependent on colony strength, these may be large or small patches, but there should be some. Spring is as good a time to spot the queen as there are fewer workers in the colony. Hopefully, you marked her last year so look for that coloured spot. If she was not marked, now is the opportunity. Presuming she was requeened last year, mark her with that year's colour, blue.

When I start my inspection, I always start at one side, smoke the end frame to drive the queen away, in case she happens to be there, and remove it carefully. This is easier said than done if the bees have propolised the frame in place, so ease it gently away from the side of the hive to break the bond. I always try to be as smooth and quiet as possible so as not to make the colony defensive. Remember to hold the frames over the hive and carefully check for the queen before putting them to one side.

In the past, I have used a manipulation cloth, simply a piece of smooth cotton sheet, attached at each end to a wooden rod. This covered the open hive and could be rolled up to reveal the frames one at a time. It kept an amount of warmth in the hive and it kept most of the bees covered.

Have a look for the brood and aim to find the queen with least disturbance. She'll most likely be in the brood area. Cage her, mark if necessary, then put the cage somewhere warm and continue the inspection. Turf out any old, dark brood comb and replace it with new foundation. With the queen safely caged you can clean up the frames, taking any brace comb and propolis off.

Have spare floors available and change the old ones. Put a clean varroa insert in and count the mites on the old ones. After reassembling the hive, run the queen back into the brood area and close up the hive. Depending on available space, you may decide to put a super on.

Your inspection will have shown the amount of stores available, feed them if necessary, though if you have been regularly hefting, you will know the status anyway. As always, before you start, have your spare equipment cleaned and ready for use and update your hive records while they are still fresh in your mind.

Good luck with the inspections. We beekeepers always look forward to a fantastic summer with lots of honey coming in. D. S.

Bee Imports from Italy Stopped

We read in several newspapers that a bulk consignment of bees from Italy has been stopped due to new regulations, though queens can still be imported. Apparently this is as a result of the U.K. leaving the E.U.

Newsletter Distribution. I have recently had the updated distribution list for paper copies of the newsletter, which differs a little from last year's list. I hope I don't offend too many people when I say that the membership renewal form is not the easiest to understand, so if you want to change from paper to the email version or vice versa, please get in touch with our Membership Secretary, Sue Lawrence, at sdbks.membership@gmail.com D. S.

“When Bees Were Bees” by Tom Davies

More on the story of Mr. Norwood, Torillo, Texas, who kept bees in very hot conditions, and had to adapt his beekeeping to suit those conditions.

His hives were kept in types of sheds, which were made of very thick, tall poles sunk into the ground, with planks of wood to make a roof, just enough to keep the intense sun off the hives.

The hives, brood boxes and supers, appear to be the same size, bottom bee space, floor and roof just flat boards. Both supers and brood boxes had a top entrance eight inches long by half an inch wide with a cleat added to close or open an entrance as necessary. Mr. Norwood found that this arrangement prevented excessive swarming.

His queen rearing consisted of a box divided into three compartments with one entrance at the rear and two at the front, on opposite sides. Each compartment was filled with bees, shut up and left in a cool place until the next morning, then released, each with a ripe queen cell.

Mr. Norwood was very pleased with this system, almost one hundred percent acceptance by the bees, and was hoping that in his next season he would be able to raise a thousand queens for sale, already having orders for them and also to be able to increase his numbers of hives up to 300.

To be able to cope with those conditions and make such a successful business at the same time shows what a remarkable beekeeper he was.

Till next time – Tom.

Cancellation of Events. Sadly, the Gower Show and the Royal Welsh Show have both been cancelled this year. Normally they run in July (R.W.S.) and August (G.S.) but the show Committees have decided not to run them this year due to Covid-19.

More on Beeswax

In the last newsletter I started on one of my favourite subjects, working with beeswax, and now I continue that theme with the various methods of candle making.

Basically, there are three types of candles, rolled, moulded and dipped. All of these use candlewick and it is most important to get the size right to ensure that the candle burns properly. Most of the suppliers sell it and some mention the diameter of the final candle, so if you intend making candles of ½ inch diameter, get

a wick rated for that size. Of course, some moulded candles are odd shapes, i.e. owls, skeps or lighthouses, and are not parallel all the way down, so it calls for a bit of common sense as there are no guidelines available.

Rolled candles. Let's take rolled candles first as these are the easiest. Sheets of unwired foundation, both plain and coloured are available from suppliers. The wax sheets must be fairly warm as cold wax is not pliable enough and very cold wax just shatters. Take a sheet, press a length of wick onto one edge. Using your finger-tips, carefully roll it up, taking care to keep the edges in line. At the end of the sheet, gently press the last edge to the body of the candle. Trim the wick flush at the bottom and leave about ½ inch at the top for burning. It is so easy that we have children regularly do it at the Gower Show.

Moulded candles. Candle moulds are usually made of plastic, glass or silicon rubber and again, are readily available, though the silicon ones are on the expensive side. Silicone, however, will last many years. Luckily, wax contracts on cooling so with glass or plastic moulds, (theoretically) the candles release from the sides though I must confess that I have only used the silicon type. However, as glass and plastic ones are still available, I presume that they work.

The wick is fed through a hole at the top of the mould and needs to be held taut and central at the bottom. Here, a couple of long matchsticks, tied together with elastic bands, with the wick in the middle, does the trick.

Silicon moulds are split down one side to allow them to be opened for removal of the candle and are held together with a number of rubber bands. Make sure that the seams are properly lined up together or you will get a moulding line down one side of your finished candle.

The mould is then inverted and the wax poured in. I stand the moulds on an old honey jar so to catch any wax which runs through. For easier pouring you will need something like a little ladle, preferably with a spout. Fill the mould with molten wax, then tap the sides to release any air bubbles which may have been trapped. If necessary, you may have to top up with wax.

Let the candles cool completely before opening them. Then, trim the wick at top and bottom of the candle.

One advantage of moulded candles is that you don't need large quantities of wax before you start, just enough for your candles will do. If you are just starting your beekeeping career, it will take time to collect the larger amounts needed for dipped candles.

Dipped candles. Here you will need those larger amounts of wax. I find that about four pounds of wax is necessary when attempting to make half a dozen dipped candles as the dipping container itself holds more wax than ends up in the finished candles.

The container I use is a long tube, open at one end and sealed at the other. This is stood in a bath of hot water, tied securely so it stays upright and is filled almost to the top with molten wax. A length of wick is dipped in, then when it has cooled a little, stretched to get it straight. This is dipped in the tube a number of times till it reaches the required diameter. Between dips I hang my candles on a frame to cool. By doing six candles at a time, I find that after dipping the sixth, the first has cooled sufficiently to start dipping again.

Despite straightening the wick at the start, the candles are not always perfectly straight, so after a dozen or so dips, I roll the candles between two sheets of glass to straighten them. Then continue dipping till they are at the size that I want.

Regarding the design of the frame, I have attached six small crocodile clips to the cross bar in order to hold the wicks while the candles hang to cool.

I keep a container of molten wax at about 70° C in the oven and top up the dipping tube as required. Be aware that as the candles get larger, they displace a larger volume of wax so, while topping up, leave space otherwise the wax might overflow from the tube when you dip a large candle in.

During dipping, some wax always drips from the bottom of the candle forming a tear-drop. Eventually this builds up and I deal with it by cutting the excess off the bottom with a pair of scissors.

After reaching the required diameter, let the candles cool, then cut the wick to about ½ inch length.

Candle Safety. When it comes to burning candles, remember that they are not toys for children, nor should they ever be left unattended and should always be in a proper candlestick or on a non-flammable surface.

Take precautions when working with hot beeswax, wear protective clothing and eye protection against splatters. Cover work surfaces and never leave molten wax unattended.

I'll continue this series in the next newsletter and mention dealing with dark brood comb and also making beeswax blocks for showing.

David Salkilld.

Neonicotinoids

In the last newsletter I mentioned a Daily Telegraph article about the NFU applying to use neonicotinoid dressed sugar beet seeds in spring 2021. Apparently, its use has been approved and a follow-up article was in the paper on 13th January. The article mentioned that rural groups are now petitioning the government to reverse their decision to allow that pesticide.

According to the paper, thirty groups, including the Zoological Society, the RSPB, the Wildlife Trusts, the CPRE and others have written to the Environment Secretary, George Eustace, with the message that “Allowing farmers to use these harmful pesticides ignores the science and seriously undermines the UK Government’s own objective to leave the environment in a better state than it found it”. The Government’s response was that some EU countries had allowed emergency use of the toxic chemical but asked farmers to destroy wildflowers around the treated site, to keep bees away.

The Changing Composition of Honey

Back in 2015, as our Society was starting preparation for its MSWCC Conference, we invited Dr. Natasha De Vere, Head of Research and Conservation at the National Botanic Garden of Wales, to be one of the speakers. At that time, she was working on a project which codified the DNA of all plants native to Wales and had been able to establish which plants bees had been foraging on through analysis of DNA in honey. The list of plants was extremely long but showed that the majority of honey came from a limited number of sources, clover, flowering trees, brambles, heather etc.

Later, this research broadened into a nationwide study of DNA in honey. Recent articles in several newspapers mentioned an article by her, published in the journal ‘Communications Biology’, which gives a comparison with what bees are foraging on today as opposed to the past. This comparison was possible because Dr. De Vere had, by a lucky chance meeting at a Bee Conference, been able to obtain a rare copy of data collected in 1952 by botanist, Alexander Deans, which she had long been searching for. Incidentally, if you are a member of the National Botanic Garden of Wales, the full article can be accessed from their website.

Dr. De Vere looked at 441 samples of honey from across the U.K. and compared them with the 1950s data. The results are very interesting. The percentage of white clover, flowering trees, heather, and red clover found in today’s honey samples were all down whilst the percentage of brambles, sycamore, Himalayan balsam, brassica including oil seed rape, were all up.

Himalayan balsam for example, which showed up in 3% of the 1950s samples is now showing up in 15% of the samples; brassicas, including oil seed rape was present in 2% of the samples in 1950 and is now in 21%. Dr. De Vere pointed out that the bees’ main food source is now brambles, which is present in 73% of the samples tested recently but was in only 58% previously.

The opposite has happened to heather which showed up in 6% of 1950s samples and now shows up in only 4%. Similarly, white clover was present in 93% of 1950s samples and is now present in 62% of them.

These changes are attributed to the change in farming techniques and practices where nitrogen fertilisers and herbicides have affected bee food sources. Plants once common in grasslands and pasture have declined while others have become more prolific.

D. S.

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“More About Bees” by Tom Davies

Coming into the second week of February, and I have been thinking of something nice to say about the winter so far, but roll on spring.

At the end of this month I will be checking on my stored dahlia tubers and making things ready for sowing of quite a few items like French marigolds and Agastache, together with some kale and leeks.

Kale sown early produces good clean leaves which can be used well before the dreaded white cabbage butterflies become really active, and it's one of my favourite vegetables.

The garden here is fairly tidy, not a lot of weeding needed to bring it up to scratch. A few nice days in April would help to get ready for sowing some beans and to attempt some early crops.

With things the way they are, due to the Covid virus, I think the Royal Welsh Show and Gower Show are seeming unlikely at the moment, with variants of the virus turning up. I can't see large amounts of people being allowed to gather for quite some time.

I hope I'm wrong, as I think that through holding shows, we attract newcomers to the craft. This lockdown seems to have tempted a good many people to take up a craft, but we need shows to demonstrate what a good craft beekeeping can be!

All the best wishes for the new season, Tom.

Ed. My thanks to those who send me these interesting articles and newspaper cuttings.

The next newsletter is due out on 1st May 2021. Please let me have your articles / items by **20th April**. Thanks.