Beetalk September 2022

General info and news about bees

Hello and welcome.

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

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

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

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

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

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

Michael Birt (Editor)

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

Please e-mail them to the editor

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Defence Against Varroa

An Accidental Observation

A colony had constructed drone brood cells between two brood chambers. In May this is nothing special. By splitting the two chambers the drone brood was torn open. A number of drone pupae were exposed due to this. A Varroa mite was observed darting about in agitation on a pupa. I observed this mite and watched something quite extraordinary happen. There was a bee about 2 cm away from the mite and without any hesitation the bee grasped the mite in its mandibles. The bee then remained quite motionless for a short while after this and I was able to note that the mite had been caught horizontally in the mandibles. I also noted that the mite had been caught by the front and that about a third of the rear section of the mite was projecting out of the bee's mandibles. This was the first glimpse of a quite unique event. Shortly afterwards the bee flew off with the mite still in its mandibles. Defence Against Varroa The Scottish Beekeeper Alois WALLNER PERWARTH Mutilated Mites For some reason a group of hives indicated a low incidence of Varroa infestation. The obvious question raised itself, as to why the Varroa population developed more slowly in these colonies. Perhaps the observation made in May 1989 had some significance! The mites which were killed by the bees had to fall to the floorboard of the hive. I therefore placed an insert protected by a mesh screen on the hive floor. This insert was checked on a 10 day cycle. The dead mites were examined by turning them on their backs and checking them using a x20 magnifying glass against a white paper background. I noticed that among the mites which showed no damage there were some which had lost one or more legs. At each subsequent examination of these colonies I occasionally found such mites. As a control I placed the protected insert on the floor of other colonies known to have Varroa. I found no mutilated mites in these colonies. In individual cases I found a number of mites which had damaged body shells. To facilitate photographing the mites I collected many such mites. Ferdinand Rusicka, professor at Vienna University had the necessary technical apparatus to make these special photographs.

The Selection of Defensive Bee Colonies

The aim of the selection procedure needs to be that colonies be selected which indicate a superior ability, relative to other colonies to defend themselves against the Varroa mite.

To this end approximate information regarding more or less vulnerability to Varroa is not good enough. The criteria and evidence must be comparable. However there is a great deal of uncertainty in achieving this condition. After a single chemotherapy procedure for Varroa control it is not possible to obtain the important data from autumn to winter. It has been observed that on nights where there is hoar frost only a few mites are bitten to death.

The bees become inactive due to the cold and the absence of brood. It is now quite certain that the catching of the mites outwith the breeding period is more difficult, since the mites are hidden under the abdominal segments of the bee at this time. In spring with the commencement of the breeding cycle an increase in the biting of the mites can be observed.

The early results with daughter queens confirms that the genetic information for defence is transmitted to the next generation. I was encouraged in the many observations made when I noticed a still struggling mite which shortly beforehand had a leg bitten off. The point of the injury showed a light reflective fluid issuing from it.

The mite is unable to move the stump of the severed leg. The leg begins to darken from the wound end toward the body. This kind of injury is fatal for the mite.

Topical Tip.

CHEAP & EFFECTIVE SOLAR WAX MELTER

You don't have to spend a fortune on a solar wax melter, or be a talented carpenter to make one. One effective method is to use a good insulated box. Styrofoam boxes, the kind fishmongers keep fish in, make good containers to build a wax melter. A fishmonger will give you one or sell you one for very little. Either discard the lid and replace with clear plastic, or, and this is better, cut the lid into a frame and stick, with gaffer tape, clear plastic front and back to create a double-glazed lid. Line the box with aluminium foil. You then need a smaller plastic container to place in your melter, a rectangular ice cream tub is useful. Place a little water in this so that the melted wax won't stick to the tub and cover it with muslin or a fine cloth. I used a pair of my wife's tights (ask first!). Place your wax on the tights/cloth etc and place the tub in the melter. Put the lid on the whole thing , seal tight and place in the sunshine. After a few hours you should find clean, lovely wax in your tub, sitting on the water. Simply ladle off and dry on paper towels. The whole thIng cost me under £10. See if you can do it cheaper.

Wildlife Meadow Initiative in Edinburgh.

WILDFLOWER meadows are to be sown in parks across Edinburgh to help scientists understand how bees and other insects are infected by urban sprawl. Over the next two years, 15 locations in the city will be seeded with a range of either annual or perennial plants to provide pollen and nectar for bees and other insects. This summer, scientists will visit the meadows and survey the insects. The results will help the scientists work out the best way to maintain a diverse population of insect species, which I turn will help sustain plants and flowers in cities. Among the first meadows to be planted this month are Joppa, Quarry Park, Pilrig Park, Saughton Park, West Pilton Park, Davidson Mains Park, with vivid colourful displays soon to appear. Firrhill High school has also been chosen to take part in the project because its grounds have suitable areas to plant one of the wildflower meadows, which are 100 metres by 10 metres in size. Wildlife Meadow Initiative in Edinburgh The Scottish Beekeeper Shaun Ross, The Scotsman The Urban Pollinators project, which involves scientists from Edinburgh university and also city council officials, is part of a £1.3million UK wide study which includes Bristol, Leeds and Reading. The decline in insects such as bees, butterflies and hoverflies, which pollinate 80 per cent of plants in Britain, is causing concern among conservationists. Over the past 20 years there has been a 50 per cent decline in bee numbers. Butterfly numbers are also falling, with three-quarters of the 59 species in Britain under threat. The wildflower meadows, which can contain up to 40 plants per square metre, will include perennials such as red campion and oxe-eye daisies, while the annuals include cornflowers, marigold and Californian poppies. Professor Graham Stone, of Edinburgh University's school of Biological Sciences, said: "Our work will help to suggest the most effective conservation methods for these insects, whose role in creating flowers we so often take for granted."

Bees and Plants

The beekeeper scratches his head totally perplexed.

A few

moments ago he is having a quiet zizz on a rare sunny afternoon (May 3rd 2 p.m.) when the tranquility is shattered by his son shouting, in a dramatic much exaggerated tone, that ‘’the bees are on the attack’’! The sound of swarming bees fills the warming air as they fly past the sitting room window like a black snowstorm before landing on the low Flowering Currant (Ribes) bush. Just as the beekeeper is about to shake the swarm into a spare empty hive they peel off and fly back home again. The colony was inspected five days previously and no queen cells were seen but today several swarm cells are present though none sealed.

None of the larva present look more than five days old. Never the less, he divides the colony and nearly expires in the heat having forgotten to discard his ‘’thermals’’ in the excitement and the temperature rises to about 18 degrees centigrade in the shade during the procedure.

Later he treats himself to a few cups of his special ‘’Russian Caravan’’ tea and writes up his hive notes and journal. This is the earliest swarm on his, seven year, record but he remembers ‘’A swarm in May...’’ and feels a little bit reassured. However this colony had more spare room than his mother in law in her granny flat and the queen is less than a year old.

He turns his attention to the present forage available in dandelion, oilseed rape, and apple blossom and realises how difficult it is for the bees to have a steady income when the temperature see- saws and the nectar stops flowing or dilutes in the driving rain. He feeds the bees a 1/1 sugar syrup and collapses on the sofa. Many people want to know what they should plant in their gardens to encourage pollinators and enable themselves to feel that they are doing something useful to save the bees.

There is now a burgeoning interest and a plethora of information on the subject as celebrity gardeners become involved in creating wildlife gardens and pollinator-friendly habitats. City and town bees are likely to fare better than rural bees in the long term unless agricultural policy on monoculture crops and lethal insecticide usage changes. ‘’Plants and Honey Bees their relationships’’by David Aston and Sally Bucknall (Northern Bee Books, 2004, ISBN 0-393-30879-0) describes the function of plants and their dynamic relationship with bees so that the reader can easily build on the knowledge gained and choose for themselves the plants best suited to their own geographic region. Interestingly, way back in 1879 nature writer Richard Jeffreys includes a short treatise on bees, plants and agriculture in his ‘’Wild Life in a Southern County’’. Jeffreys was the son of an unsuccessful farmer near Swindon who developed a keen interest in the countryside and writing about it.

Readers of a certain age may remember ‘’Bevis’’ as statutory reading in English classes. He could hardly be described as a nature lover though since if he wasn’t exactly sure what bird he had just seen he would usually shoot it. He describes a scene, ‘’The sward, where the shape of the down becomes almost level beside the hedge, is short and sweet and thickly strewn with tiny flowers, to which the bees come settling on the ground so that as you walk you nearly step on them, and they rise from under foot with a shrill angry buzz’’.

He describes how the horses need space to turn at the end of each furrow and the narrow strip of land left is covered in wild flowers. He lists the flowers seen using local names: charlock, wild garlic, convolvulus, pink pimpernel, scarlet poppy, eggs and butter flower and bluebottle, but as he does not use the Linnaean binomial system of classification, we are uncertain as to the identity of some. The latter are impossible to identify though it may be that the poached egg flower is Limanthis douglasii originally from California USA and the bluebottle may be cornflower, Centaurea cyanus,.

The other are likely to be: Charlock (wild mustard), Sinapsis arvensis, wild garlic (ramsons), Allium ursinum, Pimpernel, Anagallis, scarlett poppy (common poppy), Papavar rhoeas, bluebell, Scilla non-scripta, wood anemone (windflower) anemone nemorosa, convolvulus (great bindweed) Calsytegia sepium. Jeffries describes the changes in farming methods from dispensing with longhorn cattle in favour of shorthorn cattle and how the former were hardy and remained in the meadow all winter whereas the latter required to be housed more carefully.

He laments the ‘’grubbing’’ up of hedges to make the fields bigger as he sees the value of the shelter for wildlife. Even then beekeeping was changing, ‘’For although these days bee□keeping is no longer what it used to be, yet the old-fashioned folk take a deep interest in bees still’’.

The bees are carefully watched and tended and birds such as blue tits with a tendency to snack on bees are shot. However, if they are in the apple trees they will be safe since every pellet may destroy a potential fruit by breaking tender twigs. The farmer may be summoned home from the hayfield to house a swarm in June.

If he is too busy he will send a deputy otherwise he will hurry home himself. The bees are housed in straw skeps sheltered from behind by shrubbery and situated on the edge of the Ha Ha which gives them a clear entrance and exit. Ha Has were common features around country homes giving clear views unimpeded by fences or hedges and protection against animals entering the garden. They consisted of deep ditches walled on the inside and were called Ha Has because this is supposedly what the French declared when they encountered them.

Bees heavily laden with pollen had no obstacle in coming home and were believed to work more energetically. Jeffries thinks that they certainly seem annoyed if they tangled up in bushes and he advises anyone pursued by angry bees, whose ire is aroused, to thrust themselves into a hedge or bush since the boughs and leaves will baffle the bees! The older beekeepers were superstitious and if colonies of bees on the sunny side of the orchard decayed and did not swarm but seemed to die off it was seen as an evil omen. Now we look for sunken cell and ropey contents and have to take responsibility ourselves

Talking Beekeeping

Oil Seed Rape (Brassica napus), is part of the cabbage family and has taken over from clover in the east of the country as a major honey crop. Unfortunately silaging has stopped clover being the bountiful honey producer that it once was, as the clover all ends up in the silage pit before it flowers. There is of course still some wild white clover on uncultivated areas and in dry seasons on grazing fields but OSR has become the number one field crop for honey in Scotland.

The bees do love OSR and when a nearby field begins to glow, they always find an excuse for dropping whatever they were on and flying to the rape. OSR was originally a crop grown as a green cattle feed and was rarely allowed to reach the seed stage because the seeds were unpalatable and indeed dangerous as a feed or as an oil derivative. The seeds contained far too much erucic acid (up to 50%), which was bad for both farm stock and humans.

They also contained high levels of glucosinolates, the substance that gives mustard its bite. Plant breeding programmes in the 1970's produced varieties with low levels of erucic acid in rapeseed oil and reduced levels of glucosinolates in rapeseed derived meal, the so-called 'double low' types which typically contain less than 2% erucic acid. As much of the breeding activity took place at Manitoba University, Canada, these types came to be known in N. America as Canola (Canadian oil, low acid), but elsewhere usually as LEAR (for low erucic acid rapeseed).

The original types were thus branded HEAR (high erucic acid rapeseed) and are still sometimes grown for production of industrial chemicals and bio-diesel. Nearly 40,000 hectares of winter oil seed rape (sown in August, typically after the harvesting of the previous year's winter barley) are grown in Scotland, yielding over 140,000 tons of seed. It is primarily grown for its oil which is used in cooking and food processing. As with all plants OSR has its pests and diseases and especially suffers from botrytis and sclerotinia fungus. Both of these are sometimes treated with either mid flowering or systemic fungicides. Farmers are obliged to let beekeepers know when they are spraying crops so that the bees can be temporarily shut up in the hive to protect them from the harmful effects of the chemicals. In some late autumns the farmers fail to get their OSR sown and they may then sow spring rape which of course flowers later (late May/Jun). In some years you may be "blessed" with both.

The honey from OSR is characterised by being high in glucose (the two main sugars in honey are fructose and glucose). Glucose is a sugar which makes honey prone to crystallization. On the upside it also makes the honey very sweet. So prone is the honey to crystallize that it is essential to get it out of the supers as soon as it is ripe. Usually if the frame is ¾ capped it will be safe to extract, albeit having shaken the frames first to check that there is no unripe liquid falling out of the comb. Complications can arise in the typical mixed spring weather that is the norm in Scotland, as the bees may have harvested, ripened and half-filled the combs with OSR when a weather breakdown occurs. If it is a week or more before they can recommence harvesting, some of the early harvested honey in the bottom of the cells may well have gone solid. This is one of the drawbacks of OSR.

The honey should be extracted immediately whilst still warm from the heat of the hive, fully filtered (it may need warming if starting to crystalize) and stored in close-sealed, 15kg, food grade, plastic tubs. The honey will then crystallize very rapidly (usually within a week to ten days) and will end up as solid as lard. The honey can then be dealt with at leisure by creaming. An alternative to timely extraction is to let the OSR honey go solid and then deal with it by breaking up the combs and either melting the combined honey and wax, allowing the wax to settle on top where it can be removed to leave the liquid honey underneath. However this involves heating the broken combs to the melting point of wax (64 C (147F)), a temperature which will degrade the honey somewhat. A superior method of dealing with solid OSR in the comb is to break up the comb and use high powered centrifugal separators to separate out the solid wax and honey. This is only feasible for large commercial processors as the cost of the equipment is high. No experiments with high speed domestic spin dryers please, as even solid OSR honey is quite difficult to remove from ceilings.

Timely extraction is thus the best method for small producers. Creaming of the solidified honey can be carried out by warming the tub of honey in a warming cabinet (an old fridge cabinet or other suitable container with 3 or 4 light bulbs under a mesh floor as a heating source can suffice). The honey is taken to the soft stage (30C), but NOT melted – we want to retain the smooth crystalline structure that OSR forms when it crystallizes. The crystals can then be broken up by agitating with a perforated disc resembling a modern tatty chapper or far preferable with a twin bladed propeller on the end of an electric drill. Thread the spindle of the propeller thru a hole in a 40 x 40 cm piece of cardboard to prevent any contaminants from the drill from falling into the honey. Five minutes of judicious stirring with the powered propeller will produce a beautiful creamed honey which will remain in that form indefinitely. DON'T pull the propeller out of the tub before stopping the drill, as OSR creamed honey is just as difficult to remove from the kitchen wall as the solid stuff is from the ceiling! It can of course also be mixed with other coarser crystalized honey in a process known as seeding. Coarse grained honey is usually high in fructose and sets slowly with large granules. It feels rough on the tongue and is thus a little unpalatable.

Typical such honeys are blackberry and lime. The coarse honey is warmed through (50C (122F) for 24hrs) until liquid, fine filtered to remove any coarse grains and any bits. The seed (OSR) honey is partially melted (32C (90F) for 12 to 20 hrs and stirred until it is the consistency of pourable porridge. Any bits rising to the top are skimmed off – it should have been fine filtered at the extraction stage. Pour into a bottling tank (tall and thin to encourage de-aeration) and add the cooled (20 to 25C (68 to 77F)) coarse honey. Stir until an even soft consistency is achieved – try and avoid stirring in air. Leave 24hrs for air bubbles to rise, whilst keeping warm (20 to 25C (68 to 77F)). Bottle into warm jars (pour into the centre to avoid "layer" patterns). Leave 24hr at 14C (57F), the optimum granulation temperature, to encourage full granulation. The liquefied coarse honey now crystallises "copying" the fine crystal size of the "seeding" (OSR) honey. Store below 10C (50F) in a dark place away from draughts to prevent frosting.

The bees will inevitably end up with some OSR honey in the brood chamber, although a lot of it will be consumed during the June gap. They can use the solid honey in the winter but need some moisture to soften it. There is usually sufficient moisture in the hive from their normal metabolization. Should you end up with an unused super full of solid OSR, it can be fed back to the bees by placing under the brood box in March/ April. The bees will eagerly clean it out and will usually have it emptied ready for removal before the queen has laid up the brood box and decided to come down and investigate it's suitability for egg laying. So love it or loathe it, OSR, Canola, LEAR, Lard-giver, whatever you want to call it, it yields a lot of nectar and is a useful crop for spring build up and early summer honey. Learning to deal with it is well worth while

ALL A MATTER OF AGE

During the Summer worker honey bees have a hard life – we all know that, and the fact has gone down in the English language and is in common usage.

When we open our hives everything is activity and, of course, the bees we watch visiting flowers are always on the move, gathering nectar, packing pollen and flying backwards and forwards to their hive.

So how is all this organised? It certainly is not random but is controlled, so that everything gets done in the most efficient manner. We have seen some of the ways that individual bees communicate to one another in previous articles, but there is an overall strategy in the way that work is carried out, which is determined by the physiology of the worker bee.

A worker bee changes its activities in, and out of, the hive according to its age. This is given the grand name of 'age polyethism' and is broadly in response to the development of various glands. There are no hard and fast rules however and basically an individual bee can do virtually anything at any age, but not always with the same efficiency.

Newly-hatched workers

The little pale furry bees that crawl out of their cells start their lives as cleaners.

This requires nothing special other than the salivary glands. They also consume great quantities of bee bread, which is preserved pollen and is a highly nutritious food containing a high level of protein as well as fats, vitamins and minerals. This diet results in the development of the hypopharyngeal and mandibular glands, two pairs of head glands which produce brood food and royal jelly.

3 – 15 days

With highly developed hypopharyngeal and mandibular glands, packed full of larval food, the bees move on to the next job and become nurse bees, feeding and tending larvae of all types, and the adult queen.

They continue to eat bee bread and their wax glands begin to develop. A large force of well fed nurse bees is essential to the build up of a colony in Spring and Summer and to the production of healthy bees in Autumn.

10 –18 days

This is the period during which the wax glands, four pairs of glands on the underside of the abdomen, reach their maximum development, so these bees are the prime wax-producers.

To produce a lot of wax requires an incoming supply of nectar (or sugar syrup) and some of the substances found in the pollen are also essential. A swarm requires large numbers of these bees to build its new combs, and this is one of the reasons why foraging slows when a swarm is expected. It allows these middle aged bees to remain 'younger'.

16 –20 days

The hypopharyngeal glands, as they decrease in size and no longer produce brood food, secrete greater quantities of two enzymes: sucrase (also called invertase) and glucose oxidase.

These are essential in the processing of nectar to honey, so these bees will be concerned with receiving nectar from the foragers and converting the surplus into honey.

The mandibular glands switch to the production of 2-heptanone, an alarm pheromone particularly concerned with repelling robbers. Notice that all these periods overlap and also that as the individual moves from feeding brood to making wax and then processing nectar, she will move outwards in the nest, nurse bees being found in the central part and the nectar processors towards the outer areas.

Outside bees = 20 days - death

Finally our bee graduates to outside jobs. Her mandibular alarm pheromones and sting pheromones together with her maximum production of venom, enable her to guard the entrance, and a few bees always do this, as we well know.

These are usually bees around 21 days old and this cohort also does ventilating duties if necessary, although older bees may revert to these jobs. The Nasonov gland reaches peak development around this time and most bees become foragers for the last 2 weeks or so of their lives, collecting nectar, pollen, propolis and water. Once they move outside the hive their body clocks are ticking quite rapidly towards their death.

An adaptable system

It is important to stress that the work done by an individual will vary according to the requirements of the colony, so, in a colony which has lost most of its foragers due to poisoning, for example, bees will become foragers at an earlier age or, if careless manipulation by the beekeeper results in the removal of large numbers of nurse bees, older bees can revert to feeding brood by increasing their intake of bee bread and re-developing their head glands.

It is also useful to understand the make-up of the colony in terms of bees of different ages and to try to maintain this well-balanced state of affairs as far as possible.

SYNCHRONISED FLYING.

Have you ever watched a swarm in the act of settling on a branch? Bees seem to be flying around in a chaotic cloud broadly centred on the new stopover point. Randomness seems to be the order of the day. But what I found is that if you move your gaze from side to side slowly across the swarm cloud you will synchronise with a definite pattern of bees moving together in the one direction. Amazingly the pattern reveals that each bee keeps almost constant and equal distance from each neighbour all moving together at the same speed. The patron is of course against a background of randomness but this is no more a concern than a painted wall, more or less a blur against which the pattern stands out. Swing your head in the opposite direction and you see another group of bees in an identical pattern flying the other way. I wonder if someone could take a picture or even a movie using a synchronised camera. I remember seeing something similar once before; So did I see a group of bees flying one way superimposed on a group of bees flying in the opposite direction? Did I see bees moving from one side of the swarm, reversing and flying back again? Did I see a group of bees going around in a circle, some in front of the main swarm and some behind? If so I would be seeing some of the pattern through the cloud. And it is unlikely that they all moved in the one direction clockwise or counter-clockwise. Incidentally I tried moving my head up and down to see if I could pick up a vertical pattern but with no luck. The bees were going horizontally which is of course best for energy conservation. So I ended my surmising with this hypothesis: the bees were flying in two orderly groups (two at least) one flying around the swarm clockwise and one flying around anticlockwise. So why didn't they collide? Maybe they fly in shells' like onion skins or were the two groups flying in the same space somehow avoiding collision, at the same time noting which bees were their neighbours in their particular pattern group? If so, what a remarkable feat!! Another thought kept nagging me; were these bees that fly in patterns mature field bees that are forming a sort of barrier, a net, a fence, corralling the less mature nurse bees, preventing them from wandering. I urge all beekeepers to look carefully the next time you see a swarm. I need confirmation that I am not going nuts! The scientists among you - there are a lot of questions to answer here; may curiosity motivate you. There is always something new to discover about bees. They continually amaze me.

Top or Bottom Beeway? Does it matter?

Many of us have developed our beekeeping ways with the help of Ted Hooper's Guide to Bees and Honey. One point he makes is that we should all consider adapting our hives to the top beeway as used much in America, rather than the bottom beeway found in our National hives. But should we really go to the trouble of making changes to our hives? The beeway is the quarter inch space needed by the bees to move about between boxes. This space must be maintained between boxes so they must all be of the same pattern to maintain that space. A top beeway super must not be placed on top of a bottom beeway brood box, or there will be no space at all. Ted Hooper's point is based on his suggestion that a top beeway in the brood box makes it easier for the beekeeper to slide a super in place over the brood box without damaging bees. This is a fair point, but many beekeepers use a wedge placed between boxes when positioning the super and with careful smoking bee damage can be avoided. In my view, the main difficulties arise when purchasing new or second-hand equipment and in the use of the queen excluder. We should make sure that any new boxes added to our hives have the same bee space arrangement i.e. are either all top space or bottom space; do not mix them. Secondly, be aware that the framing of a queen excluder might affect the bee space and therefore lead to the build up of brace comb. My suggestion is that, as long as you have regard to these two points, it would be unwise to give yourself the additional task of adapting your hive to a top beeway. As long as the bees have their space for moving somewhere, they will be happy

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Bee days.
(TO BE COMMITTED TO MEMORY)

BEE	EGG	LARVA	PUPA	EMERGES
QUEEN	3 days	5 days	8 days	16 days
WORKER	3 days	8-9 days	10 days	21 days
DRONE	3 days	10 days	11 days	24 days

RAGWORT

There was an interesting article in the Weekend Telegraph, back in August, about the spread of ragwort (Senecio jacobaea) throughout the country. Ragwort is unpalatable but toxic to animals, particularly in its dried state, in hay, therefore it is generally fairly well controlled on livestock farms. It is not a threat on odd corners of arable farms, or on council roadsides where it can flourish mightily. The trouble is that it spreads to where it is not wanted. In the 'old days', ragwort was automatically pulled up whenever a country person saw it, but no longer, it seems. The active ingredients are pyrrolizadine alkaloids, (PAs) which accumulatively cause irreversible liver damage. Other plants also contain this substance, notably Vipers Bugloss (Echium vulgare). This is a real problem in Australia, as it is drought resistant and often the only green food around for livestock. They call it Patterson's curse. Honeybees do work ragwort, so is the honey likely to be toxic? This question of pyrrolizidine alkaloids was raised several years ago, and there still seems to be no definitive answer. A leading authority on ragwort toxins from Liverpool University will not eat honey from ragwort infested areas (but how do you know, without doing a centrifuge test for pollen, whether your honey has this substance in it?). The article claimed that the food standards agency had no data on toxins in honey, but they have since issued a statement that as the levels of PA's in honey are so low they pose no threat to health. I was never worried anyway! As beekeepers, we have the advantage of eating our own honey and knowing fairly well what goes into it. Supermarket honey might be a different.

A young novice beekeeper with one colony was talking to a bee farmer with a hundred colonies. "Sir, what is the secret of your success?" The farmer said "Two words" "And, Sir, what are they?" "Right decisions." "But how do you make right decisions?" "One word." he responded. "And, Sir, what is that?" "Experience." "And how do you get experience?" "Two words" " And, Sir, what are they?" "Wrong decisions!"

HIVE WATCH

Last month I suggested that a wet June and a hot July could be the ideal conditions for a bumper harvest. Well, we've had the wet June and now we can only keep our fingers crossed. If there is a flow, then make sure you have sufficient supers, the drawn frames of which can be interspaced with foundation if necessary. The recent wet weather also bodes well for a good heather crop this year, providing the sun breaks through. Again due to the weather, there appears to be colonies with no sign of brood in them. These include colonies that were collected as swarms. A couple of weeks waiting may see these colonies righting themselves. Inserting a frame of brood with eggs from another colony sometimes stimulates a queen into action. If they build queen cells, remember it is too late to expect a strong colony to emerge for the autumn but may be nursed through the winter in a nucleus box. Often the colony becomes deleted and demoralised and the only solution really is to unite it with a queen right colony after having ensured there are no visible disease problems. The nectar flow often ends after three or four weeks of frantic activity. Soon after, it will be extracting time. It is not generally mentioned in the bee books but in the past it was felt that a feed of syrup after the removal of the supers is very advantageous to the colony. The feed is converted into young bees and it is these bees that will see the colony through to the spring. Last winter, the losses were higher than in recent years and I am certain that this boost to the bee population is the answer. Later on, in the autumn you give the colony their winter feed in the normal way.

Editor

BEE KEEPING SAFETY.

Stop puffing the smoker for a while if a flame comes out of the nozzle.

Don't allow loose embers to blow into combustible materials.

Completely extinguish the smoker before storing it in any buildings or vehicles. If you dump smouldering fire out of the smoker be sure it is completely extinguished before leaving the area.

Never place a hot smoker near flammable materials such as petrol, beeswax etc.

Keep aerosols from contact with hot smoker

Never puff a smoker into anyone's face even to ward off bees.

Handle a hot smoker only by the bellows.

Keep out of the reach of children. All that is common sense, but the next beekeeper whose smoker starts a fire will not be the first. Some beekeepers attempt to light a smoker with their veils over their faces. This is a dangerous practice. Puffing the smoker with just ignited kindling can cause flames to shoot out the top of the open smoker. If this flame comes into contact with the flammable material of a veil, nasty facial burns could result.

Always throw your veil back while lighting your smoker until it is going properly.

Whilst on the topic of safety let me remind you about going to out-apiaries.

Tell your nearest and dearest where you are going and what time you anticipate returning home.

If you have a mobile 'phone, have it on your person, fully charged and switched on ready for use in an emergency.

Accidents, by definition, cannot be predicted.

Make a note of grid references of each of your sites, for they are often remote and it can possibly be difficult to give anyone directions to get to them. Stick a copy on your kitchen notice board!

Also take your nearest and dearest to your sites occasionally so they are familiar with their locations.

Do not block the entrance to your out apiary as it may be needed by the emergency services coming to your rescue.

FROM MY TRAVELS

This is the Apiary of Ian Brown that is 100 miles north of where he lives in Melbourne. He has a second home on the site that, at the time we were there, had 70 hives, one for each year of his age ! Note the second cover on the roofs to avoid the hives becoming overheated despite the fact that they were sited in a eucalyptus copse. I earned my keep by going through the hives with him until we spotted A.F.B., the only time I have seen it.

Editor

SELLING HONEY – SELLING HONEY – BBKA IS WRONG! BBKA IS WRONG! BBKA IS WRONG!

Val Simons according to the BBKA's Advisory Leaflet B10 "Selling Honey", 'Registration of premises does not apply to the direct supply by the producer of small quantities of primary products to the final consumer or to local retail establishments directly supplying the final consumer.' I've sold a small amount of my honey over the past few years and believed the BBKA in that I did not need to register. However, they are wrong. Anthony Stafford, Environmental Health Officer for Broxtowe Borough Council, told me the situation has changed since 2006.

From then on we all should be registered if we intend to sell any honey. Their website (www.broxtowe.gov.uk) states that 'To store, prepare, distribute or sell food on premises you need to be registered with the local authority.' This refers to any amount of honey, no matter how little, and in my case the 'premises' is my kitchen, where I extract and bottle. Anthony was very helpful.

He e-mailed me a copy of the application form for registration. Also he understands I have not deliberately been flouting the law and is allowing me to continue to sell honey while the registration process takes place.

Provided, of course, I start the registration process. It's free, and the form is quite simple (only one side of A4 to fill in). He will need to visit me but after the initial visit expects only to come back every few years. Do you need to register? If you sell any honey, even just to a few friends, and are not registered yet, then get in touch with the Environmental Health Department of your local Council.

Not sure on this one ED

NOVEL WAY OF HALTING VARROA

A rural n apiarist says he has a viable answer to helping stop the spread of the Varroa mite when it inevitably enters Australia. The solution - put live bees into a freezer to induce them into a state of hibernation for up to five months of the year. 2010 Nuffield Scholar, Ben Hooper, presented his findings at the WA Farmers Beekeepers AGM. He says it will give the bees a natural break from breeding over the autumn period. "We use the European Honeybee, so it evolves from the northern hemisphere. It's natural for that bee to have a brood break; a prolonged absence of no baby bees inside the box," he says. "In most areas of Australia we don't have that and dealing with Varroa, it's going to be an important way of minimising our reliance on synthetic chemicals to deal with this problem. "Bring the bees out of hibernation about now, ready to build up for pollinations." Ben says there are plenty of other benefits as well. "Freezing the bees will help to increase the longevity of queen stocks, by giving them a break from doing the heavy workload they do throughout summer. There's no reason to shut our bees now if we don't need to. It's for post-Varroa incursion."

Well worth investing in

The British Black Bee
Apis Mellifera Mellifera. Photo: Peter Edwards.

Swarm Control with Ged Marshall Exaggerating slightly,

In order to grab people's attention, is a tool much employed by politicians and many others. I must admit that when I first heard the 'blurb' surrounding Ged and his prowess in front of a crowd, I thought 'This man sounds too good to be true'. That just goes to show how wrong I can be. Other people knew better and Somerton Parish Rooms was the most crowded I have seen it for one of our winter meetings. Others had obviously heard, or heard of our speaker previously, because they came from Quantock & Taunton Division as well as our own & I dare say there were members from other divisions too. Ged's approach to Swarm control falls into three categories, prevention, management if prevention has failed and recovery if the previous two have 10 not worked. Being a commercial beekeeper with over 600 hives at the height of aseason, he has to take, what he considers to be, a pragmatic view of swarming and disease. If a queen has swarmed, firstly, he wants to get her entourage back, but she has signed her own death warrant. Swarming is not a trait that he can afford and the queen is replaced as soon as the colony is rehoused. Queens are kept for one entire season only, with the same reason□ing, as colonies with older queens show a greater propensity for swarming. Chalk brood and Sac brood are luxuries he cannot afford and whereas the hobbyist would only destroy a colony with American Foul Brood, he will destroy a colony with lesser health issues, because the economics dictate that the cost and time taken to restore a diseased colony are greater than the benefits. He does treat for varroa infestation, having used either Apistan or Apivar after harvesting and oxalic acid in the winter. There was far more to the evening than these simple extracts and it really was an eye opener for many there, but you would have had to be there to have appreciated it fully.

Winter Feed recipe.

I make absolutely no apology for inserting this item again. All those who have never tried to make their own winter feed should try this. Liquid feed is not an option at this time of year, but if the bees stores get low, they will need feeding with more solid food. You will need 1 large saucepan 1 hand or electric mixer 1 cooking (sugar) thermome□ter & moulds (Flora tub or the like). Ingredients 1 kg. granulated sugar 300 ml water 1 tsp. white vinegar Pour water and vinegar into saucepan and bring to the boil. Add sugar and stir constantly. Simmer for about 5 minutes. Check temperature with cooking thermometer, continue to heat until temperature reach□es 234°F (112°C). Remove from heat and cool to 200°F (93°C) - about 20 minutes. Whip until mixture begins to turn white and creamy with air bubbles. Pour into moulds and allow to cool undisturbed. Note: If you intend to store your candy, keep it in a waterproof container, in a suitably cool and dry place. Fondant, which is not quite so solid and therefore requires less dilution by the bees, can be made by the same process, but should only be heated to 221°F (105°C) and mixed constantly whilst cooling from 200°F (93°C) to the point that it begins to turn white & creamy. You can short circuit the process by standing the cooling pan in a sink of cold water.

Editor.

Bees Wine.

I found this in a book, first published in 1960 titled 'First steps in Winemaking', a recipe for 'Bees Wine' and read as follows.... "You stood it in the window, and the bees used to go up and down in the liquid....it made a pleasant drink." When you hear someone saying this they are quite certainly talking about that old novelty, "Bees Wine", otherwise known as Palestinian or Californian Bees or Balm of Gilead. Actually the "bees"are merely a certain type of yeast (or rather a mixture of yeast and bacteria) which has a clumping properties - hence its name, Saccharomyces Pryiformis. I'm not certain if at this point I was relieved or disappointed at not finding another use for the bees or possibly an option of Wasp Wine given that I haven't yet emptied the wasp traps! It continues....As the clumps of yeast form the carbon dioxide which is given off during fermentation carries them to the surface, where the bubbles disperse and allow the clumps to sink to the bottom again. The yeast clumps do thus move up and down and are rather like "busy little bees". Presumably "standing the jar on the windowsill" allowed it to get some sunshine, and therefore warmth to speed the fermentation, as well as light to show off the movement of the "bees". Unfortunately it is now impossible to get this yeast.

Wax Moth .

Worried that you haven't seen any wax moths in your hives this year, or don't know what to buy the beekeeper in your family for Christmas, then stop right there. You can solve the problem very easily. Vinehouse Farm bird food suppliers are trying to redress the balance and will send you live wax worms by post and they are an absolute bargain as you can see. Buy 500 and they are only 3.2p each. 'Wax worms are the larvae of the wax moth and are extremely high in fat and protein. They are soft-bodied and extremely easy to digest. A favourite live bird food for many species of garden and wild bird. They do not need to be fed'. Say Vinehouse Farms.

250 worms (1 tub) £9.00 500 worms (2 tubs) £16.00

HOW TO KILL AN ASSOCIATION.

1. DECLINE all officer and committee appointments – you're too busy. Then offer vociferous advice on how THEY should do things. 2. DON'T WORK – it's courtesy appointment. Then complain that the club has stagnated. 3. DON'T INITIATE new ideas – that requires thinking. Then play Devil's Advocate to those ideas submitted by others. 4. DON'T PARTICIPATE beyond paying your dues (they're too high anyway). Then complain about poor financial management. 5. DON'T ENCOURAGE others to become members – that's selling. Then complain that membership isn't growing. 6. DON'T READ newsletters or notices – they're not important. Then complain that you're never kept informed. 7. NEVER VOLUNTEER your talents – that's ego fulfilment. Then complain that you're never asked and never appreciated. And when the clubs grows in spite of your "contribution"…..

BEE KEEPERS' QUARTERLY.

The Bee Keepers' Quarterly published by Northern Bee Books is a somewhat weightier magazine that BeeCraft.

It carries articles on research; articles from bee keepers from around the world, (the editor lives and keeps bees in Messinias in Greece); articles on bee health; bee keeping development; the bee keeping season and much more besides.

Recent features have included colony losses; making a 'Langstroth' top bar hive; overwintering; new technology; Travellers' Tales and articles 'for the workshop', and there always a number of book reviews.

The normal cost is £28.00 pa, but through the Association it is just £18.00pa.

It needs a minimum of six subscribers for us to take advantage of the offer and John McKee, our Treasurer has kindly offered to facilitate it on our behalf.

So, send a cheque to John McKee at 27 Egmont Drive, Avon Castle, Ringwood. BH24 2BN along with the address to which you would like the magazine delivered and BKQ will wing its way to your door every three months.

Those who join and are already paying full subscription will a refund on their unused existing full price sub.

£18.00 per year is only 34 pence per week and the magazine is well worth it.

If anyone would like to read a few back copies to see what it is like, you can contact me through the web site or at BADS-BKA@gmail.com.

————————————————————————————————————

Himalayan Honey Hunter coming home with his crop

PLEASE SUPPORT THE FOLLOWING.

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www.beedata.com/beebooks.htm

UK Honey Labelling Regulations

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

1. The Word "HONEY" is required.

2. The weight must be on the label - we will ensure it is the legal size and format.

3. You can specify the area where the honey is produced. For example, Lincolnshire, Forest of Dean, Scottish Borders.

4. You can specify the type of honey. For example, Heather, Borage. The honey must be at least 75% of that particular type.

5. If you are selling the honey, you must have your name and address on the label. It does not need to be complete but you should be able to be found from the information.

6. If you are selling the honey through a third party, you must have a lot number.

7. New for 2003 You must have a best before date on the jar. We suggest 2-5 years from now.

8. New for 2003 You must have a country of origin on the jar. For example - Produce of England, Product of Scotland, Harvested in Wales. Adding the country to the end of your address is not acceptable.

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

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