



South Tipperary Beekeepers Association

Newsletter

Newsletter

April 2014



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EDITORIAL

Editorial: Here we go again on the eve of another active season. I'm sure many of ye are already busy. There is so much to do and sometimes very little time. What a great season we had last year, can we hope for the same again this year. Let's hope so. I'm sure this addition of our newsletter will be of interest to you. Again we are very lucky that some of our experts took the time to contribute. We have details of the latest approved Varroa treatment, a great article from one of our new beekeepers, association update and several other interesting articles as usual a little for everyone. It will also be available on the web. Apart from all the rain and wind it wasn't a bad winter on bees lets hope we get the occasional good day over the coming weeks. Do ye all know we have a new boss this year? Anne Horan decided to step aside and take a well-deserved break. Thanks Anne for your contribution. Dennis Ryan is now our chair person. We are looking forward to Dennis's regime and wonder what will be his legacy to the club.

RESPONSIBILITY AS A BEEKEEPER PAUL LONERGAN

I attended John Donoghues lecture in Raheen house and came away with a guilt trip as to how I was looking after my lovely bees. John was talking about how we should look after, care and take responsibility for their welfare. When we offer bees a home in the form of the movable frame beehive we take on a responsibility for their wellbeing, as well as the pursuit of our own aims and interests, example of which are the hobby aspect, the harvesting of the honey crop and relaxation. If we do not manage the colony satisfactorily and thoughtfully, for example if we undertake careless, slipshod inspections or no inspections at all, then we are being negligent and failing to carry out our duty of care. Poor practice causes bee deaths and prompts a colony to become more defensive. I know I will take more care and attention of the small things and the bigger picture (honey) will follow. Remember to change frames more often and not when they get black from old comb or stores. Enjoy your new season and form a closer relationship and love of both the physical and the natural world.

NEWLY APPROVED VARROA TREATMENT 2014 Denis Ryan STBA Bee Health Officer

The Department of Agriculture Fisheries & Food (DAFF) has recently approved the use of Formic Acid in the form of MAQS Beehive Strips as a treatment for the varroa mite. This is a most welcome development given that the resistant mite to the existing Bayvarol treatment is now widespread throughout the country. The important advantage of formic acid treatment is its effectiveness against all stages of the varroa life cycle killing mites in sealed brood cells both male and female as well as those on adult bees (i.e. phoretic mites) When brood is present in the hive, 70-80% of the female mites are under the brood cappings reproducing and now with this newly approved treatment they will not escape. All previous treatments were only able to kill mites on adult bees. MAQS is treating varroa like the brood disease it truly is.

How applied to the Hive

Apply MAQS on full sized beehives when the colony is covering a minimum of six brood frames and approximately 10,000 bees. Do not use on smaller colonies. Do not destroy queen cells that may be observed prior to or post treatment. Supersede even if thought to be set in motion by treatment, is a natural process, and should be allowed to proceed for the health of the colony. The formic acid is in a slow-release sacharide gel strip which is wrapped in compostable wicking paper. Use gloves when applying the strips. After removal from the sealed packet, two strips are placed on the top bars of the frames in the brood box. Bee space is sufficient to accommodate them, so they do not need a special spacer or eke. If you allow the queen into the brood box plus one super then place the strips between the two boxes. If you use a double brood box then place the two strips between them also. The treatment period is seven days, after which the strips can be removed or left until removed by the bees or by the beekeeper during the next inspection of the colony. They can be naturally disposed of by composting.

An effective fumigation treatment

The strips release a low dose of formic acid in a short period of time. The colony should have access to fresh air, so the use of the open mesh floor is essential. When treatment is applied the formic acid level in the hive atmosphere quickly elevates until the bees gain control of the level by movement of air. The bees are comfortable functioning at 40 parts per million (ppm) and even higher. Amounts greater than 20ppm are toxic to the mites. The acid vapour damages the mites' respiratory system and they die from acidosis.

The temperature treatment range is between 10°C and 29.5°C. It is administered during the active season when the colony has good food reserves and good access to fresh air across the width of the hive. MAQS can be used when supers are on the hive without fear of contaminating the honey as the formic acid levels in the honey stays within naturally occurring levels and also it will not be absorbed in to the wax. Formic acid vapour is corrosive to ferrous metal queen excluders (can rust over time) so the plastic excluders are more suitable.

Possible Side Effects

If the temperature level is excessive during treatment the following effects may be experienced:

- 1) Bees clustering up the front of the hive
- 2) Some young brood loss
- 3) Some adult bees and possible queen death.

It should be noted that for the most part none of those effects are found, nevertheless under warm conditions the beekeeper should verify that the colony is queen right one month after treatment as part of standard beekeeping practice.

Conclusion

This formic acid treatment for the varroa mite which is currently widely used in America and Europe appears to be the best available to date. It has a proven high efficacy and can be used almost any time during the active beekeeping season. Some commercial beekeepers in the UK carry out a regular treatment programme twice a year with MAQS. The cost of treatment is €7 approx. per hive and is available from "Bee Supplies" equipment provider. For further information contact Email: Info@NODglobal.com

COMMON DISEASE IN THE SPRING BEE

Acarine is associated with the tracheal mite acropolis wood Rennie it enters the young bees through the spiracle into the trachea and starts to lay eggs. Both the larvae and adult pierce the trachea wall and feed on the haemolymph. Death of the colony associated with mites usually occurs in late winter early spring especially when the infection within the colony is >30%.

The entire life cycle of the mite is within the respiratory system spent from the time it is transferring from one bee to the next. The female mite lays 5-7 eggs which hatches after 3-4 days and develop into larvae where they feed on its host, eventually molting. Males mature in 11-12 days, females take 14-15 days. In order to re-infect the females emerge from the trachea and attach themselves to the tip of the bees hair which allows easy transfer from one bee to the next.

Positive identification can be determined by removing the head and collar, exposing the trachea. The time of death can be critical especially in very hot weather as the bee may be badly decomposed and identification not possible. The trachea of a healthy bee is white, possibly fleshy and clear in colour whereas the trachea that is infected looks, black, or dirty in colour. A low level infection may go undetected for many years, however as the infection reaches a critical level the colony succumbs. Mite infection shortens the life of the bee and its ability to thermo regulate. When a colony is near death large numbers of bees can be seen crawling out of the hive to the vegetation in front of the hive. Inside the hive the colony looks dysfunctional with several pockets of bees throughout the hive, all looking cold, shivering, shiny and greasy (wet) look. Similar symptoms are displayed by bees suffering from chronic bee paralysis virus (CBPV). The bees' wings look disjointed and take the form of an K shape.

Bees less than 5 days old are susceptible. Close contact between bees aids transfer such as winter clustering. Winter bees have a longer life therefore several generations of mites can develop in each bee; compared to summer bee's where only one cycle is possible. Also foraging bees can lose the mite in the field lessening the chances of re-infecting others. Varroa infested colonies are more likely to be infected than non-infested colonies.

The presence of varroa lessens foraging and therefore increases close contact between bees in the hive. Infection in the thorax decreases flight muscle activity inhibiting heat generation. This in turn reduces brood rearing and the replacement of the winter bee with young bees is much reduced. This prevents the colony from developing and eventually it will drop below the critical number necessary for survival.

Certain bees do demonstrate grooming habits whereby they remove the mites. There is no approved propriety product required for the control of acarine in Ireland. Apiguard used for varroa control is effective against trachea mites. Yearly monitoring will identify those bees that are susceptible and those that are demonstrating resistance. Breeding queens from the resistant colonies and replace those that are not will reduce the overall infection within the apiary.

BECOMING A BEEKEEPER WALTER JONES

The interest in beekeeping all started for me back in January 2013 after watching a documentary on honey bees which depicted the lengths they have to go to for survival. After I read all the books I could find in my local library I decided I was going to get into bee keeping.

After doing some research on the internet on how to acquire bees it soon became clear to me that it was not going to be as easy as I had first thought as there were so many factors to consider what type of bees, what type of hive, protective clothing and equipment, some place to put the bees whether or not I was allergic to bee stings and most importantly keeping a healthy hive. So I decided to do some research on the internet to see if there were any local beekeepers in my area. I was delighted to come across the South Tipperary Bee Keepers Association website which was in my local area of Clonmel. I found the site had a lot of information on it and that a beginner's class was starting in early February. I called the number and left a message, within minutes the phone rang and it was PJ Fegan the associations secretary I let him know who I was and that I was interested in doing the beginners classes he gave me all the information I needed and the rest was up to me.

At my first class I was happy to see another sixteen beginners it put me right at ease, the lectures present were Dennis Ryan and Tom Prendergast. They set out the schedule which would comprise of six beginners classes and nine outdoor demos. They also informed us of all up and coming lectures, ranging from spring management to oil seed rape. We were also informed that an exam for beginners would take place mid-May and would be both practical bee keeping and theory. The first six classes went by so fast we covered topics such as different types of bees, different diseases, pest control, foraging, equipment, getting our first hive, harvesting the honey to mention but a few.

What I was really looking forward to were the outdoor demos I couldn't wait to see my first live hive as I had not seen any yet, to that point all I had seen were pictures on books, a few documentaries and some videos on YouTube. The first demo took place in late April at the association's apiary in Bulmers Orchard, Powerstown, Clonmel there was an excellent turnout from beginners to the more experience beekeeper. We were then split up into groups and got started. Each of the hives were opened up and inspected to see if the queen was present, if there were enough stores, any signs of disease and what shape the hive was in after a very cold winter.

I will never forget the sound coming from the hives it made the hairs on my neck stand even though I was wearing protective clothing something inside me was telling me to run, so I took a few deep breaths to relax myself and got back into it. The instructors handed out individual hive report cards which were to be filled out every time a hive inspection would be carried out and explained the importance of doing hive reports. We did not spend as much time at the hives as I would have liked to but as it was exceptionally cold it had to be a quick inspection. The month of May brought some excellent weather which meant that we could spend more time doing our hive inspections I was amazed to see how fast the colonies could grow under the right conditions they went from 3,000 bees to 40,000 over a few months.

The exam day finally arrived I was nervous to say the least all the homework was done and all topics covered thanks to Dennis Ryan, Tom Prendergast and Redmond Williams who had put in a massive effort with the beginners to get us to this point. With the exams completed it was only a matter of waiting to see how I would get on.

With the exams out of the way I felt it was time to try and acquire a hive of bees as I felt the knowledge I had gained over the last six months had made me a lot more confident but it was not as easy as I first thought as the winter losses were very high that season. I put my name on a list with the association for a hive of bees so it would only be a matter of time before I would get the call. Weeks went by and it seemed that maybe this year I would be hiveless.

The temptation was always there to go and try to source bees elsewhere but at the back of my mind there was a fear of what I might be sold and the last thing I wanted to do was bring a hive of infected bees into the locality. Then out of nowhere it happened I got a call on a glorious summers evening that there was a hive of bees available if I was interested. I went that evening and collected my bees from a local beekeeper Dennis Ryan and he could not have done enough for me, he went through everything step by step which was a great help to me. I loaded up the bees and headed home. The following day I went to see how the bees were getting on, I was amazed to see that only after twelve hours they had already started to forage and were bringing back pollen. They were obviously happy with their new location. Over the next three weeks the six frames with new foundation were all drawn and soon after the bees started to fill them with stores for the winter ahead.

The 2013 honey show took place in September and I got the opportunity to be a steward and help out, it was a great experience. I must say to see so many different entries such as potted honey, wine making, cake making, cut comb honey, candle displays, photography and art entries of all age groups it definitely got me thinking about how many categories I would be entering for the next honey show.

The only thing left to do was to prepare my hive for winter, with all winter preparation complete I could take a step back and hope that bees would make it through the winter with little interference from me. I have enjoyed every moment of my beekeeping over the last twelve months. I gained a lot of experience and knowledge, made some new friends and most importantly I passed my beginners exam and I am now attending the lectures for the intermediate level on beekeeping and fingers crossed I will pass that exam too. Hoping 2014 will be as good a year for the beekeeper as 2013 was.

NUC PRODUCTION BY THE VINCE COOKE METHOD IRENE POWER

Last year we had a visit from the beekeepers of Dromore. There was great interest in the Bailey frame change, however most interest was in our chosen method of nuc production. Every beekeeper needed to appreciate the importance of nuclet production. Without a yearly plan your numbers will dwindle due to winter losses which are now an acceptable fate in Irish Beekeeping. There are several methods to guarantee a good supply of replacement stock. All require excellent beekeeping management techniques and good forward planning. Remember the quality of these stocks may be the deciding factor in the amount of honey you get next year. Nuclet production can be run simultaneously with swarm control, you may decide to use several colonies to produce a nuc or you could use one very strong colony to produce several nuclei. Our preferred method is the latter and it is commonly known as the Vince Cooke method.

Consideration needs to be given to the following:

- Equipment needed
- Bees needed for splitting
- Source of queens
- New sites
- Timing

It is important to do some advance planning to carry out this system successfully. Make sure you have all the boxes and frames assembled in time. Decide on your queen rearing method, where are you going to source the mother queen and the bees needed for the divide.

The queen mother stock should be from a proven strain backed up by your assessments and appraisals. It may not be your best hive this year as the queen could be several years old and only maintained for the specific purpose of breeding from her.

The queen rearing stock should be selected from a hive in the apiary that has the potential to build up to a full size, an ideal colony would be a stock preparing to swarm thereby in the mood to draw down queen cells. It needn't possess the quality traits you desire, remember you are only using this hive for the purpose of raising queens from the mother hive. Indeed it is often said that the best stock for cell building are a swarming strain, usually by grafting from your breeding stock

The dividing hive which is going to supply the bees and brood for each nuc needs to be a mega strong hive preferable on two brood chambers and a few supers if you want to maximise the number of splits. Again it needn't possess the quality trait you desire as you are only using the bees, brood and frames. The genetic material for the next generation will come from the queens you rear. Feed fondant early march and 1:1 syrup in small quantities late March and April to stimulate queen laying thereby building up rapidly. Working the OSR can be a great boost.

There are three ways of getting your queens for the Vince cook method of queen production:

- 1) Rearing and introducing queen cells within two days of hatching which is our preferred method
- 2) Introducing purchased queens,
- 3) Rearing your own queens and mated in mating nukes which again is a method we sometimes use.

The most cost effective way is to rear your own and introduce two days before hatching. You must follow a detailed timetable there is no room for deviation. Continue feeding your queen rearing and splitting stocks 1:1 syrup during April, continuing during May early June if needed. If there is a flow on making sure to check for space and add second brood chamber when needed also check and break down any queen cells. The time for starting the queen rearing programme should be taken from a suitable date towards the end of May or early June, there should be plenty of mature drones on the wing at this time, Queen rearing should be started to tie in with the splitting date so that the young queens are within two days of hatching. Come hail, rain or snow, queen rearing has to be completed on time when started. The number of nuclei that can be taken is determined by the number of brood frames in the double brood chamber; there should be at least two good frames of brood for each nuc plus two frames of bees and a frame feeder, the number of frames of brood and food can be supplemented from other stocks, it is better to have only five strong nuclei than six mediocre ones. If using frames from other hives remember to check for disease. Remember the split should be carried out two days before the queens are due to hatch out.

The following is our method:

- 1) The hive to be split should now be on a double brood box with 12 – 14 frames of brood and at least two supers packed with bees
- 2) Remove the queen on a two frame nuc and bees to another apiary or this nuc can be taken from another stock of bees with the queen introduced to conserve bees for the split.
- 3) Place the required number of nuc boxes around the hive one metre out and facing in have the entrances closed up. Complete this preferable the evening before.
- 4) On the morning of splitting open the entrances of each nuc and start splitting the stock evenly into the number of nuclei that you decided on, having a minimum of two brood frames with bees, two frames of bees, a frame of food, a shake feeder and plenty of shaken bees
- 5) Shake out the remaining bees from the brood boxes, supers and remove boxes & stand, the bees will distribute between the nuclei. It is a good idea to shake a few bees in front of each entrance so that they will use the nasovon gland to attract the flying bees. Remove the stand otherwise bees will orientate back towards it. The supers can be given to another hive in the apiary.
- 6) Introduce the queen cells into each nuc from your queen rearing colony.
- 7) Check the following evening and balance out weak nuclei with strong ones by switching positions strong with weak. Switching or moving shouldn't take place once the queens start making their orientating flights; ideally they shouldn't be moved until there are sealed brood established.
- 8) Feed all nuclei with syrup after four days when all is settled down.
- 9) Leave in position until queens are laying

This method has worked quiet well for us. All the visiting beekeepers were impressed with this rapid expansion method. After the demo we all retired to the garden for Bridle's tea and scones not to mention that lovely tart.

BEE – BIZ @ STBA PAUL LONERGAN

Since our last newsletter the STBA held its annual HONEY SHOW in Clonmel in September. This show is a celebration of all the hard work of the Bee and Beekeeper and a way of showing off our wares. This year was one of the best on record with over 370 entries for honey show classes, 25 wax classes and 680 entries for the painting competition. The lectures by Redmond Williams and Jim Fletcher drew a full house and all came away full of bee chat. The success of the show must go to our super secretary Irene Power and her hard working committee well done to all.

The FIBKA president Eamon Magee was on hand to give out the prizes with the honey queen Bamba Behan. For the first time in Clonmel the 24 jar class saw 9 entries this was exceptional as the world honey show in London would not have as many and our Editor and (some time honorary Tipp man) Tom Prendergast won first prize. They say cream always comes to the top if so the Williams household must have a paddock of cream and a cellar of wine as Emma Williams won the Bulmer cup for most points of the show including 2 firsts for Wine making plus both the Williams sisters Linda and Emma won 13 firsts at the Fota Honey Show recently including most points of the show for Emma I wonder where they learnt their craft from? Our Chairperson Ann Horan won the best cook of the show with her honey fruit cake and our Treasure Gerry Clancy won first prize for his wax model of our patron saint St. Ambrose.

Our junior class was won by Philippa Harold Barry and the Novice 3 jar prize went to Eleanor Attridge. The Honey Show Dinner was held in Hotel Minella on the Saturday night and a great night was had by all. STBA had their AGM in Raheen house in December. Outgoing Chairperson Ann Horan thanking all who helped her in any way over the past 3 three years as she handed over the baton to new chairperson Denis Ryan, Mr Gerry Clancy was elected Treasurer, Fr. P.J. Fegan will remain secretary. Membership of STBA is now 120 with 25 associate members, all members should use the STBA web site for information on what's going on and the need for advice on beekeeping. The site is www.southtipperbees.com The STBA started their classes in January at the LIT Clonmel under the watchful eyes of Dennis Ryan, Tom Prendergast and Redmond Williams. The Beginners have 14 members and the Intermediate and seniors have 18 members.

Part of the classes include the outdoor demonstrations which are invaluable to both beginners and all beekeepers as the STBA are in the great position of having world class tutors to show how bees should be handled The first outdoor demonstration is April 22nd at 19.00 in the Bulmer Orchards Clonmel. The STBA Autumn and Spring Lectures were very well attended, the next one is on April 15th at 20.00 in Raheen house by Redmond Williams on "Preparing Honey for Show".

Apiary Update: Last year our outdoor demos were very popular often attracting crowds in excess of 40 members coming as far away as Limerick. Somehow it was difficult to get near the lecturer and see exactly what was going on. At a recent committee meeting it was decided to invest in upgrading our apiary. We should have extra hives. We hope that this will help. Come along and see the improvements. We are very fortunate to have great lecturers there every night to pass on their knowledge.

BEEKEEPERS HALL OF FAME

A.J. Cook The author of "The Bee-Keepers' Guide; or Manual of the Apiary." He became one of the first great teachers of bee culture on the college level in US. His book began as a course of lectures which he gave at the college. He wrote many articles for the bee journals of his day. The demand for his book was so great, that from 1876 with the first publication, the 10th edition was required by 1884.

Charles Dadant (1817–1902, French-American) Developed the Dadant Hive. He contributed articles on beekeeping to numerous bee journals— American and European. He was the founder of Dadant and Sons which kept many bee yards and established a manufacturing firm of bee supplies and equipment. Dadant acquired *The American Bee Journal* and Dadant and Sons have published it since. He translated Langstroth's *Hive and Honey-Bee* into French so the rest of the world would learn of Langstroth's contributions to beekeeping. He imported Italian bees into the US.

Dr. C.C. Miller (1831–1920, US) was one of the first entrepreneurs to actually make a living from apiculture. By 1878 he made beekeeping his sole business activity. His book, *Fifty Years Among the Bees*, remains a classic and his influence on bee management persists to this day.

PRAYER FOR BEES

Angel of Abundance
 Look after our Bees
 Keep them Healthy
 and Free from Disease
 Give them Sunshine Warm
 on their Journey each Day
 Send plenty Nectar
 and Pollen their way
 Fill up their Hives
 with the Fruits of their Labour

KEEP IN TOUCH - Text alert are being sent before all meetings. If you are not getting notification textly you name to PJ our secretary. 086 108 9652
 Check out our website regularly to see what's buzzing.

STBA committee never from a cluster we are always active.
 Watch our website for Lectures, outdoor demos starting on the 22nd April, new fact sheets added to web site.

