

# **South Tipperary Beekeepers**

## Association







Editorial  $\Diamond$  $\Diamond$ Disease Alert AFB **Study Groups**  $\Diamond$  $\Diamond$ A few Facts about Varroa  $\Diamond$ Beware the Propoliser  $\Diamond$ January February Beekeeping  $\Diamond$ The Season 2012  $\diamond$ **Control Varroa Mite Numbers**  $\Diamond$ Obituary Notice Board  $\Diamond$ 

## Editorial

What a year, I'm not going to talk about it. Hopefully this edition will find ye all in good form and already planning and looking forward to next year. This is what I enjoy about beekeeping, the constant challenge, just imagine if it was only a matter of putting on the supers and removing the full boxes at the end of the year it would be a very boring hobby. Those that persist get their just reward. We still have the honey show to look forward to. We have a big selection of articles bit and bobs for everyone. Don't forget to refer to previous editions for tips on the honey show. They are all on the web site. Have a look at our fact sheets which are also available on the web

## STUDY GROUPS......

Congratulations to all our beginners who passed their exams. Remember this is only a small step into the world of beekeeping. Keep up your attendance at all the lectures and outdoor classes. Without this level of commitment you will not succeed.

Congratulations to Gerry Ryan on his success in the lecture exam. Gerry spoke on his favourite subject "Apideas". Well done and congratulations also on your election to the executive.

We had great success at Intermediate Practical level. Well done to all boys and girls. Some also went to Gormanston and completed the intermediate scientific. Hopefully their success will be as good.

Finally a big congrats to Irene Power who completed the Senior Exams with the passing of the Apiary practical exam where she achieved very high marks which demonstrates her skill level at the hive, of course all who attend our out-door demonstration know that already.

A special word of thanks to all our lecturers and demonstrators, Jim, Irene, Anne, Dennis & Tom who all gave freely of their time at the weekly demonstrations. Dennis and Tom headed up the beginners and intermediate courses. Some of our members went further afield. Mary & Gerry conquered the North West completing one or two beginners' courses in Mayo and I heard they also travelled to Donegal, as well as looking after their own North Tipp group. Irene completed two courses in Limerick and Clare. Thanks to all I'm sure your time and effort was appreciated by the many beginners who benefited from your knowledge.

## BEWARE THE PROPOLISER......

Propolis is a hot sticky golden brown substance that seems to get very popular with our bees at this time of year. Some bees tend to gather more propolis than others and to the beekeeper its presence can be a problem. At this time of year bees use it to close gaps in the hive and sometime go a little too far and stick the whole hive together. I admit it can be a nuisance but we should not condemn it outright. Bees will propolise small gaps that are less than 6.35 mm, whereas with larger spaces they usually fill it with wax comb. This highlights the importance of "bee space". The colour of Propolis varies depending on the source. If you are examining hives in early August when temperatures are high it is a great sticky mess getting onto your hive tool and gloves creating an almost impossible job of examining hives. Disposable gloves and lots of them at this time of year are a great help. When you examine the hives next spring at a lower temperature propolis is hard and brittle and almost impossible to crack open. We beekeepers may not like it, however it is an essential ingredient in the life of the colony where it inhabitants use it for various tasks like:

- Sterilising the hive interior, preventing the build-up of disease and parasites.
- Strengthening the structure of the hive.
- Closing off unwanted entrance thereby reducing wind and rain ingress and attack from intruders.
- The effects of the death of a large mammal such as a mouse can be minimised by embalming thereby preventing the putrefaction and disease within the colony.

Therefore propolis is an essential ingredient in a colony where up to 60,000 inhabitants may be present at the one time and up to 200,000 births take place in the year. Living in close contact at a high temperature and humidity are all conditions ripe for a major outbreak of disease if certain steps were not taken. The number one defence against such an outbreak is propolis.

Beekeepers spend a lot of their time cursing and scraping propolis which end up on the scrap heap. Propolis is of great value to the beekeeper and should be saved. It has many uses such as in ointments, tinctures, paints and varnishes. It can also be found in cosmetics, creams, lozengers. There are many claims of medical properties but not a great deal of clinical research to substantiate these claims. A very small number of people are highly allergic to propolis and suffer skin problems if in contact with it. I find it is great for a sore throat. I am sure as further research is completed more and more properties will become evident further increasing its value and then beekeepers will become serious about collecting this product.

Keep in mind the value of propolis to you and your bees. Yes we know it's sticky and hard to handle but also remember that we all talk about hygienic bees and winter hardy bees. Surely the hive that collects abundant amounts of this cleansing agent is a demonstration of its hygienic behaviour not to mention it willingness to prepare for winter conditions.

#### THE SEASON 2012.....

The same theme seems to be running across the whole county North to South and into South Kilkenny. Rain Rain Rain. We had the summer in March as far as we can remember. Winter losses were zero to very little. Spring built up was good to very good. Early Queen mating was poor. The oil seed rape eventually got a chance to secrete nectar and a reasonable crop was gathered. June was wet with the typical June gap feeding was necessary for some apiaries. July was wet with one or two opportunities to collect something. Flora was scares the clover seems to have failed to flower However as always our bees can exploit those few fine hours on a few days to collect a crop of honey from whatever flowers are available. Crop expectation is ranging from 15 – 25 Kilos per hive. Chalkbrood was very prevalent in several colonies. I'll say it again if you have the experience and the bees in the proper strength, i.e. not after swarming, disease free and a good laying young queen you will get a crop. To all our beginners take heart from this and keep going. Next year is the big one.

## **Obituary**

### Elizabeth Williams

The untimely death of Elizabeth Williams on Saturday the 19<sup>th</sup> May 2012 came as a great shock to all her family and friends. Elizabeth lived all her life in Tincurry, Cahir and was an inspiration to her husband Redmond. Both were loyal and valued members of STBA and Elizabeth was always by Redmond's side. Their daughters Emma and Linda are also members of STBA and are regular attendees at local beekeeping events especially the annual Honey Show.

Elizabeth's home was always open to beekeepers an d she dispensed hospitality on every occasion in her usual efficient way. A highly respected and valued staff member of Colaiste Dun Iascaigh, Cahir where she worked for many years. Elizabeth was always present at beekeeping events to give a helping hand with family members Redmond, Emma and Linda.

Her first love was music – Irish music and dance – and with her daughter Linda successfully competed at set-dancing competitions throughout the region. She will also be a great loss to Comhaltas of which she was a very active member right up to within a few weeks of her untimely death.

She is best described as a gracious lady who always put her family first and I am certain the Lord will have a special place for her in heaven. On behalf of STBA and all beekeepers I wish to record our deep appreciation for her valuable contribution to local beekeeping and to extend to Redmond, Emma and Linda our sincere sympathy.

#### May she rest in peace

#### DISEASE ALERT ... AFB....

Honey bees are no different to humans when it comes to diseases. They also suffer from various ailments, some not so serious and others can lead to death. In this article I want to talk about one of the most serious ailments that a beekeeper can meet. Not only does it lead to the ultimate death of the colony, the hive and all its contents needs to be destroyed as it is highly contagious. The disease we refer to is American Foul Brood or AFB as it is commonly known as.

Beekeepers just like others that tend to livestock must care and act in a responsible manner. Remember all colonies are at risk. Most beekeepers do discover the disease at some stage in their lifetime.

The most important aspect is to be able to identify the disease at a very early stage and take immediate action. This will limit the spread of the disease and control should be relatively easy.

Good beekeeping practice is very important. Constantly monitor the health of your colony and each individual bee and larvae.

There are ten rules you should be familiar with in order to control AFB.

- $\Rightarrow$  Make sure you are familiar with the signs and causes of AFB.
- $\Rightarrow$  Carry out two specific disease checks on every colony the first in April time and the 2<sup>nd</sup> after this honey flow.
- $\Rightarrow$  Avoid comb transfer from one colony to another.
- $\Rightarrow$  Never bring in any equipment to your apiary unless you are sure it is disease free.
- ⇒ Never buy old combs. Sterilise any 2<sup>nd</sup> hand equipment you purchase. Best avoided if possible especially very old equipment.
- ⇒ Avoid robbing by having all entrances reduced if appropriate. Do not spill syrup or comb pieces in the apiary.
   Do not feed honey to your bees. Avoid drifting.
- ⇒ If a colony dies out seal up to avoid robbing and try to determine the cause of death. Replace all combs and sterilise the woodwork.
- $\Rightarrow$  Any weak colonies need to be analysed to find out the causes of not developing.
- ⇒ Treat stray swarms with caution. Hive on foundation and watch brood development closely. Isolate until clean bill of health is assured.
- $\Rightarrow$  Replace old combs both in the brood box and supers,

AFB is caused by a spore forming bacterium called Paenibacillus larvae. Young larva become infected when they consume the spores. The larvae are fed the AFB spores with the larvae food. The spores germinate in the ventriculus and the larvae dies after the cells are sealed. The germinated spores break through the walls of the gut and into the blood, killing the larvae from septicaemia.

The signs of AFB are as follows

- It does not affect open brood
- After larvae death the doom capping take on a wet, greasy look and darken in colour. Capping then sink and become concave. Holes appear in the capping's. If a matchstick is pushed through the sunken capping and withdrawn slowly a ropey appearance of the content indicates AFB, colour varies from light brown to near black. Length of rope is between 1 2 cm. This is considered a possible indication of the disease and laboratory confirmation should be sought. The remains dry out on the lower angle of the cell and form a hard black scale. At this stage the bees will be uncapping the cells and trying to remove the scales. To inspect the comb for scales hold with the top bar closest to us and the bottom bar at an angle of 45 away from you. Have the sun to your back or use a flash lamp. Remember early infection will only have one or two cells and that is the time to detect.

Specific detail should be given to two examinations every year for signs of disease, the first in April and again after the main crop is removed. The following is a summary of the procedures.

After opening the hive remove the outer comb and at this time of year its unlikely to have any brood, examine for scales.

Take the next frame and shake all bees down in the brood chamber.

Remember you are looking for one infected cell so even a few bees on the face of the comb can conceal the early stages of the disease.

Examine the brood, both sealed and unsealed, taking note of any abnormalities such as discolouration, odd shaped larvae or perforated cappings.

Look for AFB scales holding the frame upside down with the top bar closest to you and lying back at an angle.

Look inside any sealed cell with abnormal cappings, wet, greasy, sunken. Use a match stick, not your hive tool when checking the consistency of any dead larvae and when finished dispose of it in the smoker.

Continue with each frame, examining every cell and noting any suspicions, remember this inspection should cover all diseases. When finished close up the hive and complete your notes.

- If you think you have discovered AFB then adhere to the following:
  Do not panic, more often than not you will.
- Take out the infected comb and wrap in newspaper (always have to hand).
- Close up the infected hive immediately, assembly as it was. Do not remove the super even if full and sealed.
- A Reduce the entrance.
- On ot examine any other hives using the same equipment, gloves, smoker; hive tools may all be infected with spores.
- All need to be disinfected and the becault should be weeked
- All need to be disinfected and the beesuit should be washed.
- Send away the combs for diagnosis.
- Wrap in the newspaper and insert in a padded envelope and post to Dr. Mary Coffey, Teagasc, Oakpark , Carlow.
- Do not wrap in plastic.
- If you were probing the suspect cell with a match stick leave in in the cell to help identify it.
- If the results come back as negative you are ok.

If the result is positive immediate steps need to be taken. Close up the hive completely at night time and into the top feed hole pour 150 mls petrol killing all the bees within a few minutes. Remove the whole hive from the apiary, do not dismantle if possible and place into a hole 0.6 m x 0.6 m x 0.3 m and burn the whole lot. Then back fill preventing any bees searching through the debris.

Continue to monitor all your hives closely. It is a good idea to inform your beekeeping neighbours and remember it is not your fault that the bees picked up the disease from somewhere. It would be very useful if you could establish where the disease originated from. The above is only a summary of AFB. Look up the DEFRA web site for a very comprehensive guide with pictures on this topic. Check out the FIBKA website for your legal requirements, the disease is subject to statutory control.

The best way to avoid AFB is:

- 1. Maintain strong colonies which are the best form of defence.
- 2. Re queen the 30% of your worse colonies yearly, the good ones will look after themselves
- 3. Change comb at least 4 or more in the brood chamber every year
- 4. Select several colonies for bailey frame change every year
- 5. Destroy weak colonies do not try to fix, it doesn't work
- 6. Avoid uniting colonies, only stand along colonies should be kept
- 7. Feed whenever needed, bees should not be hungry
- 8. Change comb in the supers, leave several to one side after extracting and change during the winter months
- 9. Always be vigilant early detection is the key to containing the disease
- 10. Avoid visiting other beekeepers and handling their equipment.
- 11. If you have visiting beekeepers do not allow them to handle your equipment.
- 12. Wear disposable gloves and change often. Heavy leather gloves should be avoided
- 13. Clean and disinfect all your equipment, blow torch, acetic acid and caustic soda should be in every beekeeping house.
- 14. Avoid drifting robbing. Do not breed from colonies that are inclined to rob.

Remember AFB spores are probably present somewhere in all hives but those that are well maintained by following the above programme will prevent any outbreak.

## A FEW FACTS ABOUT VARROA.....

Varroa mites in the cell will use up to 25% of the nutritional reserve of the pupae. Added to this is the transfer of viral infections which results in the weakening of the individual bees and will eventually result in colony collapse. Early treatment will help the colony in its fight against varroa. The Open Mesh Floor (OMF) can be used for monitoring natural mite drop. This involves placing a sheet of paper on the inserts and counting the number of mites. It is best to leave the insert in for 5 – 7 days. Mite fall for Jan – March should be 2 mites/day and for the active season 7 mites/ day. Varroa has now reached a new stage in its development with the arrival of Bayvarol resistance in Ireland. It's now important that we monitor and test for resistance.

## January/February Beekeeping.....

This is the month when most people are thinking of heading off to the sales. Now with the recession things might be a little different this year less money and more free time. I think we will all have a bit more time to spare. Right now we should be thinking ahead. It may seem a long ways away but in a few weeks we will be opening hive again. I know the weather is probably miserable so start getting into the mood with a little armchair beekeeping by taking out a few books and browse through them looking for new ideas or refresh those that you have forgotten. It you only have a limited number of books why not treat yourself to one or two. Take down those old magazines and read some relevant issues. File away last year's records and prepare your book for this season.

If you are not the sit down type well there is a never ending list for you. Cleaning and repairing equipment should be done now and not on the day you need it. We are all under pressure and the best way to relieve that is spread out the work load. Any empty brood combs should have the wax cut out, boil the frames in washing soda and then wash in clean water. These frames are now ready for wax foundation. Do not insert foundation in a frame at this time of year wait until April. You can scorch the inside of empty brood boxes. This is necessary to reduce the spore count. The blow torch kills all those nasties like AFB, EFB, chalk brood, Nosema and wax moth. Remember all our troubles start from one spore so by maintaining a high level of hygiene you have a very good chance of eliminating any potential problems. Brood combs are not the only one that needs attention. It's a good policy to replace a certain amount of your super combs. Unlike old brood combs you will recover wax by melting them down. The best honey comes from freshly drawn combs and it will satisfy the needs of all those young bees in May when their glands are bursting with wax, hopefully dampening the swarming impulse. While you are inspecting brood boxes and supers why not replace any that are gone past their best by date, repair others and give a coat of fence life to freshen them up. Everyone have a roof or two that was left to one side because it was leaking. Replace aluminium covering.

The occasional visit to the apiary is a good idea. You don't have to do anything actually the less you do the better as it can be very stressful on the bees if you disturb them. Just look at them from a distance and only go near them if they need attention like a roof blown off. I'm sure all hive were well fed but just in case you should heft them especially the nucs. This could be done end of February when the day is reasonably warm or better still if an occasional bee was flying. If you find a very light colony give it a slab of fondant over the feed hole. If you find any colonies that have died out close up the entrances before robbing start. Try to determine the cause of death

January is a good time to take stock of what spare equipment you have. Make a list of what you want to buy. We all need some new frames not to mention foundation. Remember you should be replacing at least four frames in the brood chamber every year. Bee suppliers may give you a bargain if you buy early.

I certainly hope all have their smoker cleaned if not get to it straight away. Sterilise all equipment like the hive tool. Clean out those Apideas that are stored in the corner of the garage. Now is a good time to build extra equipment if you are considering an expansion. A few extra roofs, brood boxes will never go to waste.

The list is endless for the beekeeper. Let those bees cluster now but try to get through some of that big load that is constantly gathering between now and May. You will be glad that you started.

## Control of Varroa mite numbers after resistance:

New controls are becoming available all the time so it is essential to keep up-to-date by reading bee magazines, check the Association web site, attend lectures and discuss varroa with neighbouring beekeepers.

The very least that successful beekeepers now do to control pyrethroid resistant varroa is:-

Autumn: In early August treat bees with Apiguard immediately after the honey crop is removed. For the nucleus, use a half measure. Instructions must be followed carefully.

**Note:** Recent research has found that a larger than recommended couple of bee spaces above the Apiguard tray is needed for effective control. A 50 mm eke is ideal to allow better circulation of the thymol fumes.

Winter: Between late November and January when there is little or no brood apply the recently approved oxalic acid

-based product Api-bioxal by the "tricking" method. Mix the 35 grams of Api-bioxal in 700 mls of 1:1 ratio sugar syrup which gives a 4.5% concentration (approx.).

The crown board is removed and five millilitres of the solution is dribbled on to each seam of bees in the cluster using a calibrated syringe or drench gun. It is best carried out when the outside temperature is greater than 3°C. Use protective equipment during the process. This treatment will mop up mites that escaped the Apiguard and it will probably require no further controls until the following August.

Check out our website www.southtippbees.com. We have now included several facts sheets on various topics. We hope to include several others.

For our beginners we have excellent books and videos in our library. Use them, this facility is there for your benefit. Contact details are on the website.

> Would you like a specific subject matter to be included in our lecture series? If so why not contact PJ our secretary and let him know your ideas

## Attention All

Beware of the imports. Avoid the temptation to import bees.. Irish bees are the most suitable for the Irish climate wet and cold all summer long and still collect a crop. Just look at any other imports into this country be it plant or animal the story is always the same, Himalyan Balsam is now a major threat to our wildlife along the river banks, although a great nectar producer we should not aid its spread. The mink has created major havoc among our native animals. Foreign domesticated animals such as farm animals can be controlled if a problem develops but we cannot do the same with undomesticated flora or fauna. Bees just like the mink can be kept in man made homes but are always wild. Same applies to the grey squirrel, several species of deer, hog weed, Rhododendron to name but a few. Think Irish buy Irish.



## Don't miss it!!!

**Clonmel Honey show.** Don't forget to get those few jars of honey ready. Staging on the  $22^{nd}$ , open on the  $23^{rd}$  Sept. Show din-