South Tipperary Beekeepers Association

Newsletter

April 2012

Welcome to this edition of our Spring newsletter. I wonder what will this year bring us. How the seasons differ. Last year we were worried about the cold. This year we are concerned about resistant mites and the fact that the queen probably kept laying throughout the winter giving the mites a chance to breed continuously. Of course that's what makes beekeeping interesting and challenging every season, every apiary, every hive is different We have many interesting articles something for everyone, beginners, local news, ramblings and a report from down under on how the Aussies do their beekeeping. Thanks to all who contributed, without your effort this edition would not be possible.

A Vist To An Australian Bee Keeper . . . . Gerry and Mary Ryan

While in Australia over the Christmas period we visited a bee keeper in Kurri Kurri, north of Hunter Valley in New South Wales. Col Wilson and his wife and family live here on a 30 acre plot where he keeps varying types of fowl, a herd of deer, his own extensive vegetable patch and at least 50 bee hives out of the hundreds that he owns and manages.

During his bee keeping life he was president of his national association and he was also president of his local association. He attended at Apimondia for the last 30 years. In his "hay day" he produced 2000 queens a month for export and was involved in the Australian honey bee industry at an intensive level. Nowadays he has retired somewhat from this intensive work and has reduced his queen rearing for export to 200 queens per month but continues to supply the market and his customers with liquid honey.

We took a trip around his hives with him. We were a bit anxious as neither he nor we were dressed to open bees. He had the smoker lighting alright but he used it sparingly. I (Gerry) was the only one that got a sting and considering that we opened at least 30 hives that was testament enough to the docility of his bees.

Australia has more than 2000 types of native bees he told us. Out of that number 10 types are social like honey bees and all of the rest are solitary types. In his own boxes at his home apiary he had 3 varieties of the Mellifera grouping; Apis Mellifera Mellifera, Apis Mellifera Carnica, and Apis Mellifera Ligustica. It was no problem to identify the three groups and curiously enough they all seem to live happily together in his apiary side by side .But they retain their individual features it seems because when we remarked on it he said "I requeen each strain with its own strain in isolated mating areas having grafted and used I.I. also to raise queens specifically for that purpose from selected particular stocks".

As they have 9 months of weather conducive to Nectar gathering their average yield is 200 kg per hive per year. His bees have access to over 100 varieties of Eucalypts trees. The bees also have access to thousands of acres of forest and woodland ground flora and larger shrubs, and other flowering trees and bushes such as Red Gum, Cooliabah, Spotted Gum, Yellow Box and Salvation Jane to name but a few and acres of wild smaller flowering plants and agricultural crops such as Canola (oil seed rape).

He sells most of his honey to honey packers with only a small amount sold to the general public and local markets. The packers are companies which prepare the honey for sale to the shops and food manufacturers in Australia and to buyers in other countries. Australia produces about 30,000 tons of honey per year and about 40% of this is sold to other countries. The UK is the main buyer of Australian honey followed by the USA, Saudi Arabia and Germany among others.

He doesn't have " varroa "to content with and really has no disease problems as such due I expect in part to the weather and the environment. However any animals and plants brought in to Australia must spend time at a "quarantine station" where they undergo a complete health check and are watched for signs of disease. Quarantine Officers patrol the Coast line to make sure that no illegal boats pull into the shore and nobody slips in unnoticed without passing through a customs station. They consider the two most serious threats to their honey bees are the Asian honey bee and the Africanised honey bee. However the only pest that he himself has to contend with is the reasonably benign "braula" and also one of Australia's most venomous snakes which he often finds under the roof of his hives- mainly during winter months!

The last thing that he showed us was a native honey bee colony which was contained within a hollow of a two foot diameter log. He called this native bee a "Sugar Bag Bee" .This name was given to these bees by the Aborigines. This bee has no sting. The Aborigines have harvested honey from these native social bees for centuries, and have never had to worry about been stung!!.

We could have stayed happily with Col and his family for a week or even more and we couldn't put to paper all that he told us or you would be reading for a week too! We so appreciated his warm and friendly welcome and the patient way he explained his bee keeping practices to us and his views on the Australian bee keeping industry at large. We promised to meet him and his family at Appimondia in the Ukraine in 2013 please God and I hope we can reciprocate his hospitality if ever he visits Dundrum. They will receive a "Céad Míle Failte" for sure.

New Year, New Bees, New Members, New Faces.. . . Paul Lonergan PRO

The STBKA held their Dec'11AGM in Raheen House, to wind up another year
Chairperson Ann Horan addressed the meeting in the presence of a special guest none other than the World Honey Cup. The high light of another good year was Dennis Ryan going to London and bringing back the World Cup for Honey and showing the World that South Tipp is tops in beekeeping. Ann thanked all who helped her and the association for all the hard work done over the year, and welcomed the new members. Secretary Tom Prendergast spoke of the Apiaries in Cahir and Powerstown and the big numbers who attended the outdoor demonstration. Also the many new nukes they produced and were able to supply the needs of all the new members who required bees for the first time. Tom announced he was stepping down from as secretary and thanked all who helped him over the past three years.

New faces on the committee: P.J.Fagan for secretary , Paul Lonergan as PRO. Committee members Sarah Mulcahy, Conor Molloy, Gerry Clancy, Mary and Eamonn Hayes, Brian O'Brien.

Education: The classes for Intermediate Scientific Study Group started on 9/01/12 at 8.pm in the LIT on the by-pass Clonmel. Classes are on every second Monday. Beginners started on 30th January on every second Monday. Classes consist of six theory and eight practical outdoor demonstrations. Outdoor demonstrations will be on in Cahir and Clonmel. Check out the website for full details.

Lectures: The first talk was by Irene Power on getting ready for spring, it was a very informative night and well attended. Second was by Eamonn McGee on Swarming and Queen rearing again a great night. The next talk will be on 13th March in Raheen House giving by Michael Mac GiollaCoda on "Looking after our queens and their drones". Final spring talk by Dr. Mary Coffee, 10th April on control of diseases

Bailey frame change

Nature had its own way of changing comb for the bees. If the bees had enough room in the cavity they move to a new area and built new comb. Sometimes the colony just died out and nature provided its cleaners likes the mice and wax moths that cleared the area of all the old combs. The next swarm that moved in then built new combs. Bees in hives are sometimes expected to live on the same comb for years or indeed decades. This is due to the fact that some beekeepers do not change combs and even if the colony dies out the hive is quickly refilled. The end result is frames which contain disease and spore ridden comb and with a high percentage of unusable cells.

The quickest way to avoid this situation is to replace three or four combs in the brood chamber every year. This guarantees that there will be no combs older than three years. A more thorough exercise would be to change all combs. Procedure is as follows:-

* Open hive and find queen, place in match box with a few bees
* Remove the best comb from the brood nest and place into a new brood box with ten frames of foundation
* Place queen excluder on old brood box followed by an 25mm high eke with an entrance in it faced in the same direction as the old entrance
* Place new box with foundation on top of eke
* Block off old entrance
* Release queen onto old comb in top brood box
* Place new crown board above this and then close down hive
* Feed that evening

What you have is the original floor board with the entrance blocked, then the old brood box with one frame missing, next a queen excluder with an eke on top of it which has an entrance in the same direction as the blocked one below it. Above that you have a new or sterilised brood box with one old frame with the queen and the remainder new foundation. The foragers leave the hive through the new entrance and when returning recognises that the old entrance is gone and head for the new upper entrance. The house bees look after the brood and the wax producers go to the new foundation and drawn out comb which the queen eagerly lay in. Three weeks later all the brood in the old box is hatched and it can then be removed along with the old floor board. Replace with fresh floorboard.

Colonies must be reasonably strong to complete this procedure. A good time is during the dandelion flow or possibly after the OSR flow when supers are removed and bees have very little to do except think of swarming. Feed continuously while drawing out combs. The advantages of this procedure are :-

* All new combs except for one which can be replaced later
* Reduced spore count
* Something for the bees to do which reduces the swarm impulse
* Invigorates the colony with new home
* Fresh timber work brood box, crown board, floorboard.

HANDLING BEES – HINTS STRICTLY FOR BEGINNERS . . . . Irene Power

Opening a hive, lifting out frames and inspecting them is like second nature to experienced beekeepers, however we forget how daunting this can be for the beginner. There is the buzz, bees flying around your head, crawling up your leg, the fear of getting stung and dropping the frame and killing the queen. Then so much to remember, what are you looking for, have you a queen, are they eggs or not, have they enough food, did you miss any queen cells, should you put on a super – and the list goes on. But believe me it all comes naturally with first watching experienced beekeepers at work and then with plenty of practice.

It would not be easy to learn how to handle a colony of bees from a book. The best way is to watch experienced beekeepers handle bees and carry out various manipulations. There is great opportunity to do this by attending all the outdoor demonstrations organised by STBA where you will not only see one but six or seven experienced beekeepers handle the bees. It is always interesting to see the different techniques and whether you are a beginner or have experience you will still pick up different nuggets & tips from each of them.

You need to feel comfortable and protected – making sure you are well zipped up and no holes in your veil or suit for easy access. If one does get in, don't panic; move far away from the hive to address the problem. Have ankles covered and wear gloves. Bees do not normally attack without reason although the reason is not always clear, a bit like with you get the cold shoulder from your other half but don't know what you did wrong.

Bees must be approached gently and quietly. They do not like noise, vibrations, strong smells or rough treatment. Being blessed with on average more patience and gentleness than most men may I say that ladies make some of the best beekeepers and it is a hobby well suited to women. You may need help with heavy lifting every now and then but sure isn't that what the men in your life are for. It is advisable not to wear perfume, aftershave or handle horses or dogs before visiting the hives. I was recently reading an old bee book which was written in 1945 and it recommends "having a cool bath and change of underwear rather than going to the bees in a perspiring state after heavy work". I'm not going to go that low with my advice!

The beekeeper must always maintain full control of the bees she is handling. We use the smoker for this purpose. Make sure you have the smoker lighting before opening the hive. Have it well stocked up with fuel, making sure it does not die out just when you need it most. They can be expensive, a big one is best. Keep nozzle and bellows vent free from clogging up and don't let it out in the rain. Have your hive tool in hand at all times and it's a good idea to always carry a match-box in your suit pocket and have "crown of thorns", butler cage and queen marking/clipping equipment to hand. Spare equipment for swarm control should be easily accessible also.

Always have a good reason for opening the colony and do not let it open or bees exposed for longer than is necessary. The temperature should be 15°C or higher, no high winds and around mid-day is best when the foragers are out working.

* Observe the entrance for normal activity,
* Smoke the entrance (approx 6 puffs)
* Wait for 2 minutes – study hive record sheet while waiting and be sure of what has to be done, checking once more if you have all required equipment.
* Standing at the back on the hive, gently remove the roof and place it upturned on the ground beside the hive but not where it will be in the way.
* Using the hive tool prise up the crown board, lift it off and check the underneath side for the queen. Hold it over the hive and shake any remaining bees off and place it on the inverted roof.
* A small puff of smoke will clear the bees from the lugs of the frames (where you want to hold them)
* Using hive tool to lift at lugs, remove the dummy board or first frame, check for Queen, shake off the bees into the top of the hive with a sharp tap and stand it against the side of the hive.
* Withdraw first comb, straight upwards, avoid crushing or rolling bees. Inspect both sides of the comb, making mental note of the condition and significance, knowing its contents, whether eggs, larvae, capped and healthy brood (worker, drone or queen), nectar, honey or pollen. Practice will enable this to be completed in 4 or 5 seconds.
* Repeat the operation with every frame.
* Replace the dummy at the opposite end of the brood chamber and ensure no gaps between the frames. When replacing frames remember to keep the original order of the combs
* Smoke the tops of the frames clear of bees and replace the crown-board without crushing any bees.
* Replace the roof
* Fill out Record book

If there are supers on the hive, remove roof and crown board as described above, prise up the first super box, lift off and place diagonally on the roof. Remove the remaining boxes and pile on top of the first covering the last one with crown board to keep the bees quiet and warm. Then tend to the brood box as described above.

If at any time you feel the colony is getting out of control, then close it down, try another day or get some advice from experienced beekeeper.

Remember the secret of handling bees can be summed up in on word "gentleness".

Life as the Secretary . . . . . Tom Prendergast

I'm a firm believer that everyone is replaceable. Mind you I not talking about that someone special in your life we all know they are irreplaceable. I'm referring to work and other situations in life. I have seen this throughout my working career, here today gone tomorrow and business as usual. There is always someone to step into your shoes and take over. In my case as secretary of STBA I was quickly replaced by PJ Fegan and I wish him well in his new role.

I was secretary for three years and I have to say I did enjoy myself. I'm sure plenty of our members think that any of the committee members have very little to do. OK there is no one killed but at times you can be quiet busy when trying to reach a certain deadline.

Before I took over the job Dennis Ryan held the position for ten years. When asked if I was interested in taking on the role I did give it some serious thought before I agreed. I had three conditions firstly I would stay for an agreed term and secondly I wanted to contribute something different. I just wasn't willing to leave all as I found it and live off Dennis's hard work and indeed those that were there before him. So I agreed to a three year term as I felt I could achieve my goals and at the same time get out before it suddenly became "Tom's job". I believe everyone has a contribution, everyone has a skill to offer in all the various positions in the club.

As secretary I never considered myself a worker but more of a manager. A clever manager surrounds himself with excellent people who makes him look as if he contributed a great amount. That was surely my situation as I was very lucky to have a great team to help me.

I quickly formulated my plan. First and foremost on my list was a website for our association. I wanted to get more exposure outside our area and luckily the committee agreed. Most if not all the initial work was carried out by Irene Power using her expertise in this area. We are now populating it with up to date information, our factsheets are in use by many beekeepers all over the country. We have people all over the world visiting the website and indeed several requests to come and visit our bees. Last year I had some British beekeepers visiting my apiaries and they were really envious at how the Irish bees could produce such white cappings. Dennis and myself entertained an American beekeeper in the Association Apiary and he also visited Dennis's honey house which really impressed him. We still keep in contact with him.

It was really a great sense of pride when we relaunched our newsletter. Again this would not be possible only for the expert help of Mark Hearne who helps to format it and Caitlin who does most of the typing for us. Caitlin being a non-beekeeper needs to be kept sweet and we rely on an occasional pot of world class honey from Dennis to do the trick. All newsletters needs articles and that is where our many contributors play a major part. I hope we can continue for many years.

Have all this great material in circulation is fantastic but I also believe we as an association should get full credit for it. We are delighted if someone prints it off and uses it either for own use or possibly in a class room. To get full credit we now have our own logo on each sheet. I only had the idea, the hard work went to Edel Power for the initial sketch and Adrienne Horan for getting it onto computer. Well done to all.

Education is important to STBA. The theory is important however most beekeepers are only interested in the practical side of the craft. Access to hives is paramount for this and we are very lucky to have two apiaries. Keeping equipment up to a very high standard is important to portray the correct message. Two years ago Redmond Williams and myself started a programme of upgrading the apiaries. We now have replaced hive stands, hives, frames and also purchased a new extractor for members use. Redmond also organised a garden shed in Powerstown apiary. We have more to do but are certainly greatly improved. A big bonus of the upgrade is that we are now in a position to supply nucs which increase our revenue but more importantly satisfy the needs of our beginners.

Forward planning is very important, the club knows what has to be done for the year, also all members can plan around these activities and maximise their opportunities to attend. We have our yearly programme out in January so there is no excuse for not attending and just to further help we have the text alert which works most of the time. Yea I know it annoys everyone ringing at all hours of the day and night. I promise we will stop if everyone comes to our lectures.

Thanks to Joe Martin we now have our own constitution, not complicated just simple and to the point. There is nothing to be gained by have a lengthy legal document. One clause I would draw your attention to is the fact that no officer can hold their post for more than five years. This guarantees that when you take up a post you are not stuck there for life and more importantly it gives someone else a chance to show what they can contribute.

The third and final condition I had on taking up the Secretary position was that I would not be honey show secretary. Again following my job sharing strategy I always felt that both jobs should be separate. I'm delighted with the fact that is the way we have organised the committee now.

Of course with success comes failure. One of my other aims was to get over seventy members and get at least 50% of them active in other words have more than 35 members at all meetings. I did fail on the lectures, mind you we are seeing 30+ at recent events. However the outdoor demos are a great success often with 40 participants. It just shows that practical is the way to go. Thanks to our demo team Dennis, Redmond Jim, Irene, John, Anne and all others who stepped in whenever the need arose.

Life as the secretary was enjoyable sometimes demanding but always rewarding. I'm delighted with what was achieved while I sat there but I'm even more delighted that I stuck to my plan and vacated the seat leaving it to someone with a new outlook on how things should be done. Thanks to all for making it happen.

FLOWERS FOR BEES . . . . . Tom Prendergast

I'm sure you often wonder why we like to emphasis the planting of flowering plants. The answer is very simple no flowers no nectar or pollen no bees. We cannot influence the main crop but we can have an input into the very early spring flow and that is when bees need a little help. We all realise the importance of the ivy pollen in autumn but bees gauge their activities on what is coming in the front door. In other words they start egg laying based on the amount of pollen they collect each day in the spring time regardless of the amount they have stored. The ivy pollen will make a major contribution to the brood rearing but it is the spring pollen that stimulates egg laying. With the above in mind early flowering plants should be planted.

It is now mid-February and the bees had several chances to fly facilitating those important cleansing flights and gathering the fresh pollen. The crocus and snowdrops are now in full bloom and the bees are very active gathering pollen even on very cold days. Who ever said bees fly only in temperatures above 10^{o}C should get a new thermometer. It may only be a few bees flying but they make all the difference. This autumn plant several dozen bulbs in a sheltered sunny corner of the garden and watch the bees work them. It is not a good idea to plant in the apiary as bees can soils them on cleansing flights which could result in disease spread. Winter heathers are so easy to grow that every serious gardener and beekeeper should have a few in the garden, bees love them.

I think if you got that much done this year it would be a great achievement. Look up our fact sheet on wild gardens. Last thought one lime tree is worth an acre of clover. Plant one tree this year either a Lime, Horse Chestnut, Sycamore, Willow, Hazel, it's your choice.

Good for the body and good for the brain

Honey is the only food that contains all the ingredients necessary to sustain life including enzymes, vitamins, minerals and water and it is the only food that contains a substance called "pinocembrin" an antioxidant associated with improved brain function. Sure it's no wonder all beekeepers are so intelligent!!!!!!!!

CONTROLLING VARROA DESTRUCTOR . . . . . Dennis Ryan

Testing for Pyrethroid resistant mites:-

Varroa was first detected in South Tipperary in 2001 and considering the fact that Bayvarol - used in the correct manner – would be an effective treatment for 12 to 15 years, it is now to be expected that resistant mites will soon be present in our hives if not found already.

How to Monitor:-

Method A: Check the post treatment Varroa mite mortality by cleaning the tray in the OMF and check the daily mite drop immediately after treatment finishes. Significant mites drop indicates a mite population remains and therefore your treatment has not been effective.

Method B: The test which was developed in the US and modified courtesy of the National Bee Unit in the UK.

Test in the July when the mite population is at its peak.

* Cut a 9 x 25 mm piece from a Bayvarol strip and staple it to a piece of card 75 x 125 mm.
* Place the card with the strip facing inwards in a 1lb honey jar.
* Prepare a mesh e.g. green house shading to cover the top of the jar with a rubber band to secure it in place.
* Shake adult bees from 1 or 2 brood combs into the upturned roof or large container. Make sure the Queen is not on the comb.
* Scoop bees into the jar until about half full (150 – 200 bees).
* Place a sugar cube or a teaspoon of sugar in the jar for food and cover the jar with the mesh and secure.
* Store for 24 hours in the dark at room temperature with the mesh uppermost.
* Hit the upturned jar over a white paper 3 times and count the number of mites knocked down.
* Immerse the bees in the jar in a weak solution of washing up liquid to kill them and then place the dead bees in a coarse sieve.
* Secure a cloth under the sieve to catch the mites and then wash the dead bees under a fast running cold tap.
* Count the mites washed down. If the total number of mites is less than 5 discard the results.
* Calculate the efficacy as a percentage by dividing the number of mites knocked down by the total number of mites i.e. knocked down plus washed down and then multiply by 100.

If the number knocked down is less than 50 % of the total, then this indicates resistance is present. If the pyrethroids (Bayvarol or Apistan) are the only control measure used, it is most likely that the resistant mites will overwhelm the colony in the following year. It is therefore important that beekeepers using pyrethroids test their bees every year and to avoid heavy losses.

If you find resistant mites please inform your local association secretary so that other members can be made aware of this fact and thereby avoid colony losses in their apiaries.

Bumble Bee . . . . .

Queen bumblebees emerge from hibernation between March and May depending on the individual species, weather conditions and geographical location

Once a fertilised queen has emerged in the spring her first task is to replenish her loss of fat bodies used up during the winter months of hibernation with pollen and nectar from suitable flowers. The queen also needs the pollen and nectar to develop her ovaries.

She then needs to find a suitable location for a nest to form a new colony. While there may be plenty of nest sites it is the quality of the surrounding nectar and pollen sources that are critical to the rearing of the first workers. These together with a continual forage source are essential to the future of the queen and the colony.

It is quiet common in spring time to see queens flying low to the ground or crawling amongst vegetation as they inspect potential sites.

The nest site chosen is usually in a warm situation and needs to be well insulated e.g. old mouse nest. These may be in a hole in the ground or on the surface depending on the species and the suitability of the site.

Once the nest site has been selected the queen makes a honey pot from secreted wax which she fills with nectar. This will provide her with a food source during inclement weather and whilst she is brooding her first young. Over the same period of 2 – 3 weeks the queen collects pollen to form a large lump which is a bit bigger than her body. On this she lays a few eggs. These hatch into larvae which become the first workers. In order to speed up their development the queen lies across the pollen lump and incubates it even buzzing her wings to generate heat.

The larva goes through several moults and then they produce a silken cocoon when they pupate. After a few weeks the first adult workers emerge from their cocoon. They are usually very small compared to the queen.

It takes a little time for the newly emerged workers coat of hair to dry and about a day for its wings to harden sufficiently for foraging duties. Nest duties include building new cells, feeding larvae and helping new workers to emerge from their pupae. Foraging provides food for the colony nectar for the adults and pollen for the developing larvae.

Bumble bees will fly up to 400m or more from the nest to find forage resources and can generally find new supplies if needed. However they do need suitable forage during the life of the colony from April – September. Any loss in forage can result in colony loss.

While the workers are engaged in nest and forage duties the queen concentrates on producing more off springs. The workers produced later in the year are bigger than the first hatched but smaller than the queen. Number of workers in a colony can vary depending on its success, species ranging from 40 – 150+.

Towards the end of the season some of the eggs laid by the fertilised queen develop into new queens rather than workers. Queens also produce males at the end of the season when they come to an end of the sperm stored in a special organ from mating the previous season. Once males and queens have being produced the colony has essentially served its function. The males after having mated die in the late summer early autumn as do the old queen and workers

Following emergence the new bumble queens may stay around the nest for a while. Eventually they mate then forage to build up their fat body reserves for hibernation. They seek a suitable hibernation site usually a North facing bank beneath the bark of a rotten tree and remain there until the next April to start the season again.

Attention All Beginners:

Our outdoor demonstrations will start shortly. It's the way to learn the real facts about bees and how to handle them. Usual topics spring build up, swarm control, nuc production, frame change, disease control and plenty more to see. We hope to retain our two lady instructors Anne and Irene who according to last year's beginners were better at instructing that the Drones.

Colour Your Queen !!!

If born in 2011 mark white

Warning

Have feeders ready for June gap

Outdoor Demonstrations:

If you want to attend our outdoor demonstrations you must have adequate protective clothing otherwise permission to en-