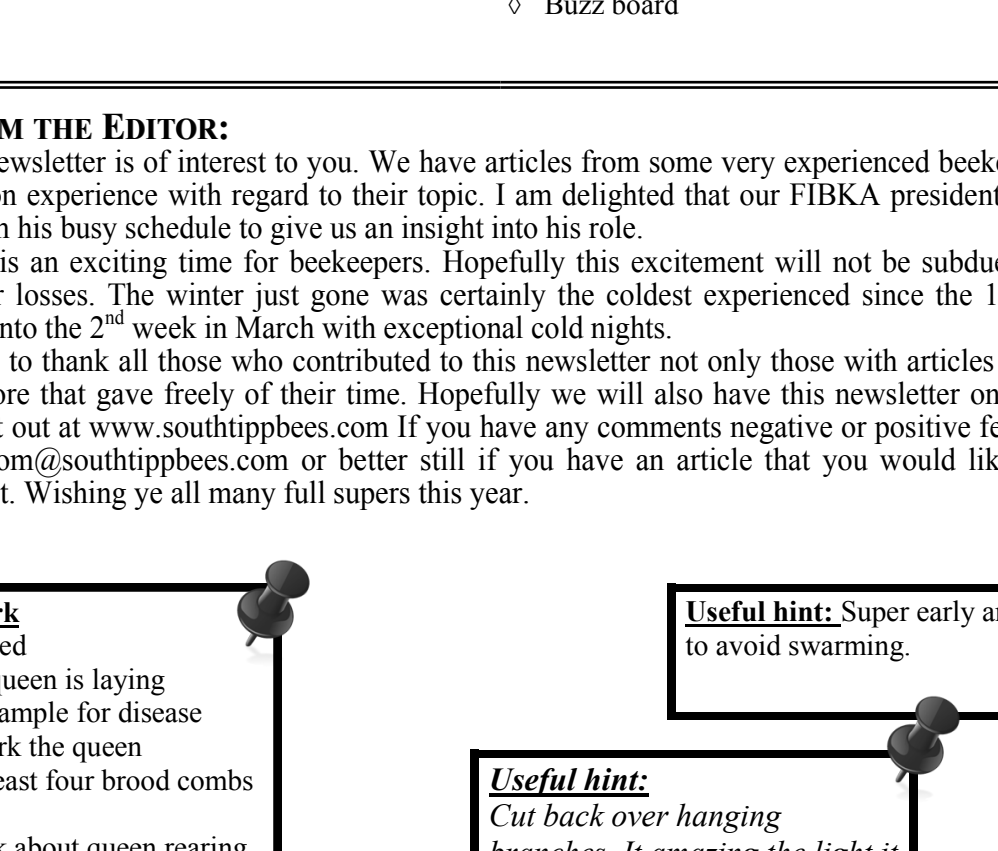


South Tipperary Beekeepers Association

Newsletter April 2010



- Editor's Notes
- Association News
- Hints for Beginners
- A word from the President
- To Be or not to Bee
- A little bit of Science
- Simple Increase
- Might your mites be resistant
- Preparing for the honey show
- Poem The Beekeeper
- Buzz board

NOTE FROM THE EDITOR:
I hope this newsletter is of interest to you. We have articles from some very experienced beekeepers all with hands on experience with regard to their topic. I am delighted that our FIBKA president took the time out from his busy schedule to give us an insight into his role.
Spring time is an exciting time for beekeepers. Hopefully this excitement will not be subdued due to heavy winter losses. The winter just gone was certainly the coldest experienced since the 1980s and now we are into the 2nd week in March with exceptional cold nights.
I would like to thank all those who contributed to this newsletter not only those with articles but there are many more that gave freely of their time. Hopefully we will also have this newsletter on our web site. Check it out at www.southtipper.com If you have any comments negative or positive feel free to forward to tom@southtipper.com or better still if you have an article that you would like printed please submit. Wishing ye all many full supers this year.

Spring Work
Feed if needed
Check that queen is laying
Check and sample for disease
Clip and mark the queen
Replace at least four brood combs
Super early
Start to think about queen rearing

Useful hint: Super early and often to avoid swarming!

Useful hint: Cut back over hanging branches. It amazing the light it allows onto the hives.

Useful hints: During the active season a good beekeeper will always have spare queen ready to use

ASSOCIATION NEWS
As usual the activities are many with no time for clustering. We had a very successful AGM and two speakers for that night. Early January we had our annual dinner which was a great night. Members who attended our lectures were treated to very good speakers. The study group is back in full swing. Our beginners' classes have 25 members a fantastic boost to the association. Outdoor group is starting to get on their feet. The web site is proving a major attraction with approximately ninety new visitors a month with several returning. If you are willing to help with any of the activities let us know.
We would like to see more members attending lectures. The outdoor demonstrations are a fantastic way to update your knowledge.

HELP FOR BEGINNERS . . .
"The Prevention and Control of Swarming" Tom Prendergast
Swarming to the beginner can be a major source of frustration and the stumbling block in their quest for a crop of honey. It is not easy to control a large colony that is intent on swarming unless you understand the basics of the 14 and 9 day examination. The best way to understand it is to attend our outdoor demonstrations.

There are no problems if the colony is not preparing to swarm but what does the beginner do if they find queen cells and more often than not the queen is not marked or clipped.
Understanding why the bees swarm and how to prevent the initiation of it is extremely important.
Annual population cycle show a very rapid increase in adult bee population from the beginning of April. It is not long providing the weather is fine the Brood box starts to fill up with both brood and bees and if nothing is done there will be insufficient room for the emerging bees. Additional space is provided by adding supers, usually 1 at the time as the colony build up. Therefore supers are for bees and if the colony is adding supps all the incoming nectar being used to feed the super, being used solely as a parking place for late April. The web site is proving a major attraction with approximately ninety new visitors a month with several returning. If you are willing to help with any of the activities let us know.
We would like to see more members attending lectures. The outdoor demonstrations are a fantastic way to update your knowledge.

Large area of combs is required for the ripening of nectar to honey so that the nectar/honey can be hung up to dry. The change of nectar (30% sugar) to honey (80% sugar) is approx 100:30 this requiring 3.3 times more space for nectar compared to honey ready for scaling.
There are two priorities involved in supering
1. To provide space for bees
2. To provide space for nectar ripening.

Other relevant points
Add an extra super when all but the two outside frames are full of bees in the top super or initially in the Brood box
It is better to super early in the spring and be somewhat slower in July when the main honey flow is on.
Top super is the most popular, use bottom supering if using foundation.
Excuser is a personal option.

The importance of supering as a factor in swarm prevention
The most important factor which causes swarming is the lack of an adequate threshold level of queen substance throughout the whole colony which is discovered and proved by a series of experiments by Dr. C. Butler in Rothamsted in the 1950s. However it is known by observation but not proven that other factors play a part in swarming namely:
⇒ Season
⇒ Shade
⇒ State of flow
⇒ Strain of bees
⇒ Manipulation
⇒ Weather
⇒ District
⇒ Comb space for queen
⇒ Comb space for nectar honey.

Considering the two principles of supering (room for bees and nectar ripening) it is clear that by providing extra supers not only are the two conditions relieved but ventilation is also improved. Supers provide room for nectar storage freeing up the brood chamber for egg laying. The most important factor is the prevention of congestion within the hive and the efficient distribution of queen substance, young queens providing the greater levels. The strain of bees is an important factor, some swarming more than others.
Season, shade, weather, flow all seem to play a part in swarming.

To prevent the loss of the bees the beginner can make up an artificial swarm. Basically you are separating the queen and foragers from the brood and nurse bees. Extra equipment is needed and it can be used as a means of expanding the number of colonies you have. There are several variations to this method but only a straight forward version is given here.
Making up an artificial swarm without finding the queen.
This can be done if you rely on two facts:
1. If you put all the bees into a box the queen must be in it also.
2. Young worker bees will always be attracted to brood.

When Queen cell are found during routine examination action to produce an Artificial. swarm should be taken.
• Move brood chamber and floor to about 600 mm away from original swarm.
• Place new brood chamber on old strand with empty frame of comb or foundation.
• Select 1 open queen cell well nourished and mark frame with drawing pin – brush all bees into new brood chamber. Shake all remaining frame into new brood chamber and destroy q cell.
• Brush bees from sides of brood box and floor board into new brood chamber.
• Put 1 frame of brood into new brood chamber (check for Queen Cells first and remove if any.)
• Now all bees and Queen should be in new brood chamber.
Place frame with marked Queen cell into old brood chamber

Then re assemble the hive as follows from the top
• Roof on top
• Brood chamber with old frames and their brood, 1 frame of foundation 1 Q cell, no bees
• Super if present
• Queen excluder
• Brood chamber with 1 frame & Brood and foundation all the bees including Queen
• Floor board underneath
Reassemble on original stand

Leave the whole lot overnight when the nurse bees will move up to the brood to keep their warm and feed.
Next day lift off top brood chamber and leave 600 mm to side of original stand on its own stand with floor board, crown board and roof. Both colonies should be checked 4 days later for Q cells. After that do not disturb and bees from the swarming colony. You must remember that this hive will not have a laying queen for the next 7 days. You now have two colonies, which you can unite but you have to find the old queen first or you can keep both. Another option would be to make up two nucs from the brood and nurse bees giving each a queen cell. All this can be seen in practice at our outdoor demonstrations. Come along and learn or better still share your experiences with other beekeepers. Nobody knows everything. New ideas are always welcome.
This method accomplished two essentials of swarm control.
1. Stop bees from swarming out
2. Replace Queen.

Queen marking colours
If born in 2009 mark green
If born in 2010 mark blue

A WORD FROM THE PRESIDENT: Dennis Ryan.
I was born and reared on a farm in County Kilkenny where my father kept a few beehives but they did not interest me at the time. I also learned how to play the bagpipes from my father and continued this practice all my life. I now play with Cashel Pipe Band. I did some shooting in my younger days but not so much now as my eyesight is not so good as it used to be and I feel that would be a danger to myself as well as others around me. Since retirement from teaching I now have more time for family, bees and beekeeping as well as band and fishing. Having such a fascinating hobby as beekeeping means there is always something to do - more often than not out door work or work in my workshop. My good wife Carmel does not have to put up with me as much, and I think I am less of a nuisance around the house. Even though my role as President can be demanding in terms of time and travel I still manage to renew friendships with my former colleagues and catch salmon and trout in the rivers Anner and Suir. My two sons Richard and Denis have their own occupations and hopefully beekeeping may interest them in the future. As a Kilkenny man living in Tipperary the banter in conversations inevitably leads to sport - in hurling this could be Tipperary's year at Kilkenny's expense - the rivalry continues.

We are unfortunate to have poor honey seasons in recent years (three in a row) and it is hard to blame the rank and file members of Associations for lack of interest or enthusiasm as a result. Some Associations are doing outstanding work, others not so much. It is the few dedicated members in an Association that make all the difference. They take the initiative to organise the programme for the year and so keep the interest alive even if yields are low. Each member of the working committee is given responsibility for some aspect of Association activity - FRCO, Apiary manager, Librarian, Education co-ordinator, Varroa Officer, Membership recruitment Officer, Beginners Course Co-ordinator, Newsletter Editor, Web Site Manager and also as in our Association taking care of the Honey Show, we have a Honey Show Secretary and a Cup Secretary. The rotation of officer posts on a regular basis is most desirable. Having stepped down as Association Secretary I wish my successor Thomas upon every success during his term of office. I also congratulate Irene on her election as Honey Show Secretary. She has been a great ambassador for the Federation in her capacity as Honey Queen. Our annual programme of activities continues to keep the members involved in organising and attending committee meetings, lectures and Christmas course, study group, out door demonstrations, heritage day, and arbour day (nature walk), honey show and Christmas party. This range of involvement has assured the continued development of our Association over the recent past and it continues to grow into the future as it adopts fresh ideas from new members. The activities within STBA which had the most influence on my own beekeeping over the years were: the Study Group, Gibbings and our Annual Honey Show.

The role of education is vital for acquiring the necessary know how to successfully manage our bees. Our Study Group has provided expertise at many levels - Lecturers, Examiners, Honey Judges and Exhibitors. I attended a Cork Study Group session recently where we are preparing for their Intermediate (SC). I wish all sixteen members every success. Beekeepers need information on up to date developments in the craft in order to contain annual losses. Apart from control of Varroa we have the added complication of poor queen mating due to lack of adequate drones and poor weather conditions.
The large number of new recruits to the craft in many Associations is encouraging. We have twenty five members attending our beginners' class this year and hopefully the two Association Apiries will provide them with bees. At national level I wish to thank the membership for electing me as their President. It is a great honour to fill such a prestigious position and a marvellous opportunity to meet fellow beekeepers throughout the country. My role as defined by the Federation is to provide the necessary supervision over the Federation and its members as well as to undertake all measures to promote the welfare of beekeeping and beekeepers in Ireland. The outstanding work rate and efficiency of some Executive members has made my task a pleasurable one indeed. New members have come on board and some posts became vacant as other members moved on and new personnel are asked to take on the tasks - as was the case with the positions of Summer Course Programmer, Convenor and Manager as well as National Honey Show Secretary. Our magazine 'An Beachaire' was upgraded with extra articles from additional contributors.

It was a disappointment when efforts made by the working committee set up to establish 'a home for beekeeping' were in vain due to lack of delegate support at Congress 1st year. The objective remains for some future date. My travels as President have taken me to many Associations throughout the country as well as to Northern Ireland. I gave a presentation at UBKA Conference, BIBBA Conference and at two London Honey Shows. It was a pleasure to have the honour of officially opening the London Honey Show last October. For the past two years I was invited to attend the UBKA Annual Harvest Thanksgiving service during which I was given the honour of reading one of the lessons. My wife Carmel and myself were guests of Norman and Rosemary Walsh for both weekends. We were treated royally and taken to see all the tourist attractions in the county. DAFF was again emphasised the need for approval of more varroa treatments, especially Oxalic Acid. More extensive resistance testing to the Bayvarol will take place this year by Dr. Mary Coffey and DAFF as well as a survey on colony losses. In conclusion, I wish to thank all the members of STBA, especially those with whom I have worked on various projects - such as bee breeding, lecture programmes and honey shows. I wish you all full supers in August.

TO BE OR NOT TO BEE
By Marie Devane
We started off by growing our own vegetables and then started thinking, wouldn't it be great to have our own honey, not as easy as sowing seeds though - we would need bees.
Not knowing anything about beekeeping our first port of call was our local beekeepers association. We joined the beginner's bee keeping course, which was made up of both theory and practical classes. How the theory related to the practice was explained. The literature provides numerous ways of producing nuclei and full colonies from the artificial Queen Bee had to come from somewhere, but learning about the workers and drones and all they get through for us to have honey on our porridge in the morning was just amazing. We were never too sure that this was for us until we attended the outdoor demonstrations. All safe inside our suits, off we went. Just to witness the bees first hand going about their busy life and determined to carry out their tasks even when we were poking around, swung it for us. I must admit to wondering if it was a good or bad time to start beekeeping when you would hear so much about disease and bee numbers falling so dramatically around the world, not only that, but hearing about the everyday challenges faced by experienced beekeepers - we decided to give it a go.
We are now the proud keepers of one hive and one nuc. We were very happy only opening the hive for inspection every two weeks, the joy of seeing eggs even if the queen was playing hide and seek, at least we knew she was there. I must admit to going down and standing nearby and watching the bees coming like troupers with their sacks full of pollen of all different colours a few times a week. Their perseverance to deliver their load even when they might miss the landing pad and have to try again was inspiring. We jumped the hurdles of feeding and treating for varroa but then came the icy weather and snow. I would go down every so often, to listen very quietly with my ear to the side of the hive, relief to hear the humming sound and hoping that it was not my imagination. Every day that the temperature outside increased we would say - any sign of the bees - eventually that day did come. The sun was shining and we could see the bees flying in - rays of the sun, another hurdle jumped.
The experienced beekeepers keep talking about the honey crop but for us two beginners our challenge is to keep our bees alive and healthy and I am sure the honey will follow. I can not emphasise enough the importance of help that is available to beginners at the end of the telephone line. It may be asking too much to be spared any hiccups and hopefully if they come, they will only be small ones, as we and our little band of bees go forth on our adventure.

A LITTLE BIT OF SCIENCE WHAT IS PHOTOSYNTHESIS?
Photosynthesis is the process by which plants, some bacteria, and some protists use the energy from sunlight to produce sugar, which cellular respiration converts into ATP the "fuel" used by all living things. The conversion of unusable sunlight energy into usable chemical energy, is associated with tactions of the green pigment chlorophyll. Most of the time, the photosynthetic process uses water and releases the oxygen that we absolutely must have to stay alive. Oh yes, we need the food as well!
We can write the overall reaction of this process as:
 $6H_2O + 6CO_2 \rightarrow C_6H_{12}O_6 + 6O_2$
So the above chemical equation translates as: **six molecules of water plus six molecules of carbon dioxide produce one molecule of sugar plus six molecules of oxygen**

Hydrolysis of polysaccharides

Sucrose. The glycoside bond is represented by the central oxygen atom which holds the two monosaccharide units together.
Polysaccharides, monosaccharide molecules are linked together by a glycosidic bond. This bond can be cleaved by hydrolysis to yield monosaccharides. The best known disaccharide is sucrose (table sugar). Hydrolysis of sucrose yields glucose and fructose. There are many enzymes which speed up the hydrolysis of polysaccharides. Invertase is used industrially to hydrolyze sucrose to so-called invert sugar. Invertase is an example of a glycoside hydrolase (glycosidase).

SIMPLE INCREASE
By Redmond Williams
Now, that we are suffering an increased incidence of winter losses caused by many reasons ranging from poor queen mating due to the unfavorable summers of the past three years, the increased effects of Varroa and the viruses they carry, or poor apirary management by the beekeeper. We all need to produce more nuclei and full colonies to replace losses. The literature provides numerous ways of producing nuclei and full colonies from the artificial Queen Bee had to come from somewhere, but learning about the workers and drones and all they get through for us to have honey on our porridge in the morning was just amazing. We were never too sure that this was for us until we attended the outdoor demonstrations. All safe inside our suits, off we went. Just to witness the bees first hand going about their busy life and determined to carry out their tasks even when we were poking around, swung it for us. I must admit to wondering if it was a good or bad time to start beekeeping when you would hear so much about disease and bee numbers falling so dramatically around the world, not only that, but hearing about the everyday challenges faced by experienced beekeepers - we decided to give it a go.
We are now the proud keepers of one hive and one nuc. We were very happy only opening the hive for inspection every two weeks, the joy of seeing eggs even if the queen was playing hide and seek, at least we knew she was there. I must admit to going down and standing nearby and watching the bees coming like troupers with their sacks full of pollen of all different colours a few times a week. Their perseverance to deliver their load even when they might miss the landing pad and have to try again was inspiring. We jumped the hurdles of feeding and treating for varroa but then came the icy weather and snow. I would go down every so often, to listen very quietly with my ear to the side of the hive, relief to hear the humming sound and hoping that it was not my imagination. Every day that the temperature outside increased we would say - any sign of the bees - eventually that day did come. The sun was shining and we could see the bees flying in - rays of the sun, another hurdle jumped.
The experienced beekeepers keep talking about the honey crop but for us two beginners our challenge is to keep our bees alive and healthy and I am sure the honey will follow. I can not emphasise enough the importance of help that is available to beginners at the end of the telephone line. It may be asking too much to be spared any hiccups and hopefully if they come, they will only be small ones, as we and our little band of bees go forth on our adventure.

NOTE FROM THE EDITOR: Now you have the theory why not come along to our outdoor demonstrations where Redmond will be demonstrating all of the above and lots more. Check website for details

MIGHT YOUR MITES BE(E) RESISTANT? *By Irene Power*
"CHANGE BEFORE YOU HAVE TO", the quote by Jack Welch (Famous American Businessman), is very appropriate to our treatment for Varroa. There are no signs of resistance to Bayvarol developing in Ireland at present. However looking at the development in England that day must be very close now. To continue beekeeping in the long run a more varied control procedure is required. There are only two chemical treatments licensed for use in Ireland, Bayvarol & Apiguard. Here I will tell you about my experience of using Apiguard & follow up treatment of Oxalic Acid (trickle method) as an alternative treatment for Varroa bearing in mind that Oxalic Acid is not yet legalised in Ireland, but it is being tried in some test apiaries.
I find the Apiguard easy to apply, & it is efficient & no risk to the users or the bees. To me it is no more difficult than putting in your Bayvarol strips. The one thing to remember is that to work effectively the ambient temperature needs to be 15°C so early autumn is best and also top insulation will be required. If it requires feeding, I lose off the open mesh floor. Treat after the main crop is removed. Normally we would feed first, a minimum 5 litres of syrup. It is not recommended to apply Apiguard & feed simultaneously, for fear the bees spend all the time taking down the feed & not bothering to clean out the Apiguard. I don't think it is a big risk and I have done it on occasion, although I know some who would not agree. Basically, it comes in a 50g tray, remove the foil cover & place the open tray & piece of foil face upwards on the frames in the brood chamber. Place an eke (with feed hole blocked) over the brood box & close up with the roof. Sometimes we use upturned feeders instead of an eke. After 2 wks, place a second 50g tray on the hive in the same manner. Treatment should continue until the containers are empty usually takes 4 - 6 wks in total. For reference & further reading see FIBKA Guidelines on Varroa Destructor & Publication "Parasites of the Honeybee" by Dr. G. Murray Colloff - on FIBKA website: www.irishbeekeeping.ie
Note from the editor: Just like the author I would like to point out that the use of Oxalic acid on your bees is illegal in Ireland. At present it is being used in test apiaries only. However it is important that we understand and are ready with alternatives when resistance is discovered

PREPARING HONEY FOR SHOW
By Jim Power
The various ways to present honey for sale and showing are: run honey in various colours, i.e. light, medium and dark, naturally granulated and soft set also heather honey. It is best to have the various grades selected, labelled and stored separately in their own class in food grade containers during extraction, also the other popular ways are comb honey, i.e. a frame fit for extraction, sections cut comb and chunk honey. Select a clean environment preferable a purpose honey house or room, for most operations or for private use where it may not justify building a purpose built set up one may use the kitchen but be warned it may cause aggravation with the other half.
The essentials for preparing honey are: a high standard of hygiene and cleanliness, a method of heating honey to 42°C, ideally a thermostatically controlled cabinet or a thermostatically controlled type of brauco boiler, a settling tank with a honey valve or a food grade bucket with a honey valve, a nylon organza straining cloth also clean honey jars and lids.
Always use the oldest honeys first. To prepare run honey for showing first place a bucket of honey into the heating cabinet with the thermostat set at 40°C for a period of 48 hrs., after 48 hours remove organza straining cloth to settling tank to allow bubbles to return to surface, bubble and being under weight. Everything being passed so far the judges will be looking for clarity and brightness, good viscosity, a nice flavour or fragrance and a nice taste. I suppose a lot of the faults are generated by extracting unripe honey.
Entering for any show one should always read and re-read the schedule first and conform to same, another important check is to make sure that the honey is entered in the right colour class and all the jars are the same colour, if you are not sure ask the show secretary to check with his or her grading classes, Spring Work.
Enough for now, this should be enough to get the beginner entering honey to his or her first show, at another time we will progress maybe to comb honey and greater heights maybe we will have a greater number of entrants at the Clonmel honey show this year. Entering honey competitively is a great way to up the standards. Be seeing you there.

THE BEEKEEPER *By Breda Joyce*
Over the winter months
The beekeeper catches up,
Searches out each nuc and frame,
Repairs and cleans,
Stays ahead of the game.
He sniffs the pollen in the air
The whiff of nectar already there.
The hum, the drone,
The prospect of a swarm
On a swifter's morn.
Armed with the tools of his trade:
Smoker, hive tool, bee veil, gloves,
Like an astronaut bound for the apirary,
He is doing the one thing he loves.
The hauling of supers is no easy task;
A good year will test his back.
Brood chamber checked,
Moose guard in place,
A smile spreads across his face.

BZZZ BOARD
Honey Show in September 25 and 26th
Out door demos to include
Queen rearing
Nuc Production
Swarm Control
Bailey frame change
Starting in Cahir 19th April
Starting in Clonmel 27th April
Wanted, Interesting articles for our newsletter
Next edition September 2010