

South Tipperary Beekeepers **Association**



2016

♦ A Winning Essay by Irene Power ♦ A Little Bit of Sci-

To Do and Know B4 new Arrivals Finding a Swam

Apiary Update

Contents:

♦ Editorial

Planting for your Bees Future

♦ Notice Board

EDITORIAL

♦ Drink and Bee Mer-

ry



I hope at this stage the weather has improved. We should have some idea as to how our hives have overwintered. Bees fly-

ing in and out of a hive doesn't necessarily mean that the colony is viable. You need to look for all the other external signs and eventually lifting the crownboard will give the full picture. Assessing from the outside is always good. Watch the number of bees flying in and out. Are they bringing in pollen? An over active hive might suggest robbing is going on. Are there a lot of large wax particles around the entrance? If there are, then this hive is probably being robbed out. Pollen loads on the back legs is usually an indication that the queen is laying. Check over the crown board - any activity there? A large cluster of bees over the feed hole would indicate that room may be needed. Did they take down the fondant? If no, then it usually indicates that there is something amiss. Why not put in an insert

APRIL IN THE APIARY Tom Prendergast

signs are that the colony is getting congested - remember bees can expand rapidly in April so you need to take action. They can be working on OSR and you may not know that immediately. The dandelion will be in bloom yielding pollen and the bees can collect a small surplus of nectar which really drives the colony forward. If you are in that situation and cannot open and examine the brood box why not pop on a super by quickly opening the hive and on with the queen excluder and then

to several frames of stores then remove a few from the outside and replace with foundation. Likewise the colony might have a few empty frames again remove and replace with foundation. Remember the idea is to have six frames replaced in your brood box every year. The sooner you start the better. The removed frames that are full of stores should be sterilised and keep them for nuc production, otherwise keep for the June gap. When you do eventually get to examine you colony - the first stage is to establish if the queen is laying - you don't necessarily have to see her unless you are clipping and marking. Seeing eggs and sealed brood indicates that all is ok, check her laying pattern. Has the queen room to lay? It is detrimental to a colony's expansion if the queen is restricted at this time of year. Has the colony enough stores? Of course check for disease. Varroa should always be monitored and especially if you have a small number of hives, each colony should be monitored for 7 day every month. This will give you fantastic information of mite build up. You could monitor on a weekly basis. Keep good records. Most important inputs are the date, what I did, what I need to do, when I need to go back.

ago we started in the second half of March, other years we had to wait until early May. My advice is don't open too soon watch the weather, examine from the outside - looking at the insert or over the crownboard can tell a lot, put on the super without disturbing the brood nest will be a major help. PLANTING FOR YOUR BEES FUTURE Early April is still not too late to consider planting a few shrubs and trees for the bees. You may need to water on a regular basis hence the importance of not over planting. If you are interested in plants now is the time to get the seed into trays of compost and start them off under plastic or glass. Indoors on the window sill is perfect. When big enough to handle transplant into individual pots or space out in trays. There are several to choose from. If not interested in going to the bother of starting the seed off indoors why not make up a bed outdoor and scatter some seed there. Some of the easiest plants to

grow from seed are Poppy, cornflower, calundula, hyssop, phacelia, hypericum. June is a good month for propagating softwood cuttings from shrubs. There are several trees you can grow from seeds. Either purchase the seed from a seed supplier or you will have to wait until the autumn to gather. Make a commitment that every year I will grow half a dozen trees, horse chestnut, sycamore, cherry, hazel, sweet chestnut to name but a few. A Shrub that grows easily from seed and bees love it is

APIARY UPDATE Tom Prendergast

cotoneaster. Check underneath the shrub for few seedlings that have propagated, dig up and transplant.

tion. We hope to have six hives for honey production. We intend to get six teams of five or six beekeepers and each team will look after one hive. Each team will have beekeepers of different levels of skill and all will be assessed by our lecturers the comb, manipulate a hive, decision making, honey production to name but a few. We hope to get many beekeepers involved. Please pass on your name before we start so that we can have the teams ready to go at our first examination. Email tom@southtippbees.com or text me at 0879109360. Varroa monitoring: We would like to gather data on mite population growth throughout the season. This can vary from hive to hive and location to location. I'm sure there are several factors that determine how this develops. We would like to have 100 hives monitored in our Association on a weekly basis. If we had 40 beekeepers interested - that's less than three hives each. The idea would be to check inserts every Sunday and report the numbers at our outdoor demonstrations or by

email text. This could be a very useful exercise in helping us to understand Varroa population growth over the Season. The earlier you start the better. Why not select your hives now and get monitoring on a weekly basis. Keep results and then pass

Have a suitable secluded location identified for your hive? • Have you got a hive stand, feeder, etc? I hope all our beekeepers and their family embrace their new arrivals with the added bonus of some liquid gold come next August. WHAT TO DO WHEN YOU FIND A SWARM A swarm is a cluster of bees which usually contain workers, a queen or queens and drones. They can be found in various situations from hanging on a low bush to a very high tree, on a post or side of a wall on the ground or underneath the hive. There are two types of swarms a prime swarm which is the first swarm to leave the hive and can contain up to 50% of the population and the old queen or the first virgin to emerge. The second and subsequent swarms to emerge will vary in size from a few thousand bees to as small as a cup full and will contain from one to several virgins. This is called a cast.

The actual hiving of a swarm can vary from one situation to the next. It can be as simple as shaking the cluster into a suitable box to having to climb up a ladder and brush or smoke the bees into a suitable container. First consideration is to take your safety and that of others into consideration. Under no circumstances should this be compromised in any way. A suita-

ble container can be a simple cardboard box, a bucket or a custom made container for the purpose. The latter usually has a sliding shutter and adequate ventilation with the option of hanging frames into it. The procedure is as follows for a cluster

Allow the flying bees access into the container Bees will quickly start to fan calling those outside to join them.

Place the box underneath the swarm

hanging on a low branch:

the frame you give them. There are various apparatuses you can purchase from the bee equipment suppliers to aid the capture of a swarm in an inaccessible place such as a very high branch. If the swarm is to stay in the same apiary it can be hived up straight away and the bees will all gather in their new hive. Quickest method of hiving a swarm is to open the top of the hive exposing the brood frames. Place an empty super on this and just throw the whole box of bees into the super. The bees will quickly run down in between the frames. The more traditional and slower method is to arrange a sloping board up to the hive entrance and throw the swarm on to it. The bees will

move upwards towards the entrance and if observant the queen can be spotted. Avoid the temptation to handle her and

Avoid feeding for 3-4 days. Check brood carefully for signs of disease. Take sample of bees for disease diagnosis. If tempera-

Note from editor: The following article won the essay competition at the National Honey show. You may have seen it in the Four Seasons magazine or in An Beachaire under a different author as a result of a mix up. Well we are proud to publish it in our newsletter as the author is Irene Power. As it relates to beginner beekeepers who are starting their

HOW WOULD YOU ADVISE A NEW BEEKEEPER TO IMPROVE NOW THAT THEY HAVE EXPERIENCE OF THEIR FIRST YEAR IN BEE-

If you have made it through one full year; four seasons and managed to still have your colonies queenright and all happy &

1. Has the colony sufficient room? 2. Is the Queen present and laying the expected quantity of eggs?

Understanding the basics of feeding and winter preparations, treating & disease assessment & control. Spring & summer management. These are all the topics on a beginner's course but now that you have your first year under your belt you would need to get into a deeper depth and understanding of these topics If you consider Hooper's question 2 "is the queen present & laying". For a first year beginner it is a challenge to answer this question confidently with "yes she is present and laying", firstly they find it difficult to see the queen and secondly they find it difficult to see eggs, so when beginners can answer this question confidently – that is success. BUT, as you progress from beginner, this question means more, you will need to learn to assess the queen and learn when queens are not up to standard and need to be replaced. This will help to ensure that you maintain good quali-

Early in the season the colony should be building up and increasing the size of the brood nest and on each inspection you should be looking at the brood pattern, the area should be completely sealed over with very few empty cells. To improve your beekeeping this is an area that needs special attention. It certainly takes experience & skill to always have good prolific queens in your colonies & being able to recognize when they should be replaced & to take actions

Another area of focus in order to improve our beekeeping not just for beginners but for all of us is to constantly increase our knowledge about diseases. Spending time on "disease" inspections - when we are assessing the health of the colonies. Examine the brood, open & sealed. Understanding the signs & symptoms of the brood diseases and adult bee diseases is critical to our success as beekeepers. Also, being able to access conditions such as drone layers or drone laying queens. Keep up to date on disease treatments, making sure to monitor & treat for Varroa. Recog-

Drink and Bee Merry: This year we had a very interesting lecture on Mead Making given by Redmond Williams. We are hoping that several participants will now start to use this new found knowledge and produce a few bottles of mead for our honey show. Our objective is to have a minimum of twenty entries in this class by 2017 so you are still not too late to start. Mead production just like wax moulding should be part of every beekeepers yearly activity. If you did not attend the lecture

Reginners Course

Starting Saturday of

Norijand long

shelves in our sheds. Our apiary committee will be out in force to arrange hives, apply preservative and any other job that needs attention. At the time of writing we have removed a few nucs that died out. Some did go into the winter in poor condition and hopefully we will not suffer too many losses. This year we are going to organise the Outdoor Demonstration night a little different. As usual we will have our beginners and 1st year beekeepers together and provided with special attencontinuously during the demos and we intend to pick a winning team based on a number of criteria including ability to read

Have you got spare frames? - remember that all hives take 11 frames and that a nuc will usually have five.

HIVING A SWARM:

Approach with caution and make sure passers-by are at a safe distance

With a quick and firm downward motion shake the swarm into the box

Close the lid or if an open mouthed vessel invert allowing space for the bees to assess

If the queen is not present the bees will not stay in the box and you may have to shake them again. Move them to a shaded area if possible as excess heat from direct sunlight might entice them to abscond. If possible leave until that evening when all will have joined the cluster and then remove. Sometimes it will not be possible to shake. A brush may be necessary plus the use of the smoker.

Celebrate

do not clip or mark until you know her status-She may not have yet mated

ment is not to your liking then requeen. Swarms can also be united without fighting.

second year it is very timely right now. Congrats Irene on winning the competition.

Now take stock & learn from your experience take note of what worked well and what didn't work. What did you learn from your first year beekeeping? What was the weather/seasons like? When & what had you to feed and what was the result? We learn from our mistakes so try to assess the results of your actions. It is important to start keeping records from the beginning. You might think, because you only have one or two hives that you'll remember everything and don't need to write it down – think again! Colony evaluation and keeping simple hive records is an education in itself & essential for proper management

of your bees. Hooper's five questions not only help to focus on the reasons for opening the hive, but also gives you information that you can reflect on afterwards. Each question should be answered whenever a colony is opened. You can add to these questions depending on what information you want and what suits yourself. Brood pattern is critical & being able to access this is paramount to the health & vitality of your queen & hence your colony & your honey crop. Monitoring you Varroa mite drop and recording treatments and the effective-

tine starting at the outside of the hive you will build up experience very quickly. A colony will not behave the same in its second & third year as it did in its first year. If you started out with a young queen, the first year may have been about building up your nuc to a full size colony of bees. Managing large colonies of bees can be quite different to managing small colonies or nucs. For a beginner in your second & third year it's all about having a plan & getting the basics right. Some of those basics would include really understanding Hooper's five questions and being able to properly assess your colony in order to answer them but more importantly understanding what actions you need to take depending on the answers. Understanding swarming, life cycle and the importance and theory behind the 9 day or 14 day inspection routine.

replacing combs every year. Feeders will be required for hives, extra nuc boxes are essential. The bigger more productive hive will need more supers. You can see the importance of planning ahead (winter is a good time for this) &

higher proportion of mandibular gland secretion when compared to the workers diet. Not only is the quality a determining factor but also the quantity, as queen larvae must consume more food than workers in order to develop into queens. Growth rates are similar for the first three days but then increases dramatically in the queen larvae. Queen larvae always have copious amounts of food when compared to workers. The principal feeding stimulant for queen larvae is sugar. Royal jelly has 34% sugar compared to 12% in the brood food of the worker larvae for the first three days. It does increase after the 3rd day to 47% owing to the addition of honey. The nature of the sugars also differs with glucose being the main sugar in the royal jelly. The phagostimulant quality of the sugar encourages the larvae to consume more food which in turn encourages further growth both external and internal organs. One such organ is the corpora allata which produces a hormone known as the juvenile hormone (J.H). The quantity of the hormone at a critical state 3rd day in the development of the larvae determines

Lesser calendine

underneath the OMF and check a week later. This always will give you an indication of activity within the hive. You should be able to estimate the number of seams of bees and also the amount of brood. Count the Varroa drop down. If the tell-tale the super. It will only take a minute and the bees have room until you get back to them for their first examination. A super over the crownboard can also be beneficial if you are really busy. Don't forget to put on the excluder over the feed hole otherwise the queen could travel up and start laying. You may need to complete a tidy up of the apiary. Now is the time to cut back those low hanging branches. It's too late when your bee suit is torn. Have the supers ready to go. It's always good to have a few new frames of foundation in the centre of each super. No need to mention the importance of comb replacement in the brood box. If the colony is crowded due The timing of first examination will vary from season to season. Some years we could start early April, indeed a few years

This is the third and final year in our present apiary programme. We have to complete the planting and install a few more

them on at our meetings or demonstrations. Keep note of any treatments you carry out. We carried out a similar type experiment on treatments at our study group over the last two years. The outcome of that study is that MAQS strips did not work whereas Apiguard gave almost 100% success rate. If this type of study was carried out yearly it would be invaluable when a new product is launched as we would have the baseline study completed. In other words we would be in control of our own treatment strategy and not rely on others to give us the information. WHAT YOU NEED TO DO AND KNOW B4 THE NEW ARRIVAL. Getting your first nuc can be a very exciting fulfilling and rewarding time for both you and your family. The promise of having your own supply of honey is indeed a great feeling. However it can all go very wrong if you are not prepared. Consider the following: • Are any of your family allergic to a sting? Have you got a bee suit, gloves, hive tool, smoker? Have you got a hive for the nuc? - does it take the same frame type as the nuc?

If the swarm is from the beekeepers hive the prime swarm usually settles nearby hopefully on an accessible height but could be high up in a tree. It can stay there for a few hours to a few days. On a rare occasion the swarm makes this site their permanent home. The cast again usually settles close by but it can quickly fly away, either to another site close by or some distance away. Swarms are usually docile when first emerging as they have gorged themselves with honey. However all should be treated with caution especially if from an unknown origin. When the swarm settles it forms a cluster with an outer shell of 75 mm and a hollow centre. This outer shell will have an entry point of 25 mm. Bees will be seen dancing on the out shell as they communicate to others about the position of a new site.

Other times the bees may have to be gently smoked to encourage them into the box. A frame of open brood will also help but be mindful that if you are hiving a swarm of unknown origin and it contains spores of AFB they will quickly contaminate

A WINNING ESSAY

KEEPING? IRENE POWER

ness of them is also critical.

ty stock in your apiary.

soon enough or in a manner that does not impact your crop.

Five Hooper Questions worth considering:

healthy in the box, then CELEBRATE - that is no small achievement. The first year can be a very exciting but anxious time for the beginner & to come through a full year & still have your bees and even a little honey in the jar is a wonderful feeling. To succeed longer term will take some commitment & patience and a lot of knowledge & experience but it will be very reward-

3. Is the colony development as fast as others? Any Queen cells present? 4. Are there any signs of disease or abnormality? 5. Are there sufficient stores to last until the next inspection? WHAT CAN YOU EXPECT IN YOUR SECOND YEAR? Not every colony is going to behave the same and the more information/knowledge you can gain from each inspection & observation (internal & external) the more experience you will build up. I would encourage observations from outside the hive throughout the year - what behaviours are you seeing, what they mean, and what can you tell from your observations. The bees are constantly giving us out messages & if you get familiar with their behaviour and rou-

artificial swarm can be completed without finding the queen and is often a method practiced by new beekeepers. It is important now that you are in your second year to plan ahead. How many hives do you want & have the time & knowledge to maintain. My advice is don't get too big too fast. Pace your growth with your increased ability & knowledge. You will need extra equipment to handle swarming and also any intended increases. You will need to be

which one is said to carry poisonous pollen, one is very suitable for damp conditions, which flowers first white or blackthorn, which produces a nutty flavoured

Text Alerts: If you are not receiving a reminder contact Walter Jones at 085 7423994. Text him with your name

All should be in flower now or next Study Group. This Winter we concentrated on the Scientific Section of the Study Group. This Winter we concentrated on the Scientific Section of the month. Which one grows from bulbs, **Study Group:** This Winter we concentrated on the Scientific Section of the Start. It's a been sometimes as popular as the start. It's a start of been sometimes are proved to start. It's a been sometimes of the start of the st beekeeping course. As usual this part of beekeeping is never as popular as and will give you a better understanding as to the processing of the processing of the processing of the processing and will give you a better funders and will give you and you give you and you give the practical. We had 10 members who were brave a hove that a dook at "A little bit important part of beet keepings take place in the hive. Have a look at "Me had a look at "Me have a look at "A little bit important part of beet keepings take place in the hive. Have a look at "A little bit important part of beet keepings take place in the hive. Have a look at "A little bit little bit and while hive have a look at "A little bit little bit a look at "A little bit little bit little bit and little bit lit why certain developments take place in the hive. Have a book at "A little bit of sciences developments take place in the hive have a book at "A little bit of sciences developments take place in the hive have in beginners classes as usual ways in early April.

Why certain developments two Saturdays in early April.

Sciences out over two Saturdays in early April. honey, which plant has a toffee aroma Gorse Blackthorn Tracence in this equion, we intered to run out Whitethorn Ragged Robin

All these factors are important to improving beekeeping skills. I believe it can benefit people hugely to do the beginners course a second time. Second time around can be a lot more meaningful and the information that went over your head the first time will now begin to make sense. Better again if your association is running an improvers study group, be sure to attend. Attend association meetings/talks. You will learn a lot from just speaking to other beekeepers. Avail of outdoor demonstrations as this is a great opportunity to see experienced beekeepers handle hives & you will have something to compare yours with. Take help from experienced beekeepers if it is available. Read books, increase your knowledge, keep yourself up-to-date, beekeeping practices are progressing & changing all the time, particularly in relation to disease. And most of all enjoy your new found hobby! Nice work so far! Reference: Guide to Bees & Honey: Ted Hooper A LITTLE BIT OF SCIENCE - FEEDING BEHAVIOUR OF THE THREE CASTES: Worker Larvae: Nurse bees produce brood food from the hypopharyngeal and mandibular glands. This is the primary food of the worker larvae for the first three days. On the third day some pollen and honey are also mixed in. Adult Worker: The basic nutrient requirements of the adult bee are found in honey and pollen. Brood food may be digested during food exchanges and used as a nutrient source. Nectar or honey provides a sugar for energy, pollen is necessary for proper glandular development and internal structures during the first 8-10 days of a worker's life The sugar requirement of a bee can vary according to the activity; when resting usage is 0.7 mg suger/hr and when flying its 11.5 mg sugar/hr. A lack of pollen during the crucial 8-10 days results in a shorter life span and poor development of the hypopharyngeal glands and the fat bodies. Different pollens have different protein strengths, so the type of pollen is also important. Drone Larvae: The feeding requirements of the drone larvae is not very well studied but presumed to be more or less the same as the worker. The quantity of food received is much greater than that of the workers and it has more protein. Adults are fed for the first few days by the workers and gradually start to source their own food from about 7 days onwards. The young nurse bees feed them on a mixture of brood food, pollen and honey. Sperm production is not related to the amount of protein received but may influence longevity and mating ability. Queen Larvae: The quality and quantity of food fed to the female larvae determines whether a fertilised larva develops into a queen or worker. The type of cell used for the production of queen and worker differ but this is not the determining factor. The quality of food of queen larvae known as "royal jelly" differs from worker brood food. Queen larvae are fed a whether a female larva develops into a queen or worker. or have now forgotten what he said don't worry - We have now included a fact sheet on our web site with all details. No point in waiting, now is the time before we really get busy with outdoor activities. Ok so you don't drink, you have no interest in the honey show, well here's a very good reason to start making Mead - it a very powerful aphrodisiac. I thought that might change your mind. Here's to your health.

Swarming Swarming will be one of the major management techniques you will have to contend with in your second and subsequent years of beekeeping. There are various methods of swarm prevention and control. Giving your bees enough space early in the season will help. Replacing combs with frames of foundation. In your first year you probably had a lot of foundation in the brood box & supers. You will now need to learn when & what combs to replace & deal with congestion. Attention to this area can prevent or postpone swarming. So you find queen cells, what are you going to do? Best to have a plan before you find them & be ready to deal with them straight away. Remember the principle of swarm control is to separate the queen from the brood. There are many different methods but my advice for a novice is to pick one or two known successful methods and master them before experimenting. The artificial swarm & removing the queen to a nuc are simple proven methods to work. The

ensuring you have all you need to hand when you are faced with difficulties & hives that want to swarm. Disease nising when Varroa might be a problem, especially deformed wing virus recognition.

Brain Teaser: Know your shrubs and plants. Try to identify the following six.

from its flowers.

Bluebell, Lesser Calendine, Ragged Robin, Blackthorn, Whitethorn, Gorse Answers to Brain teaser: