

BEE LINES



Newsletter of The Beekeepers Club Inc. Est 1998

Mission statement: To enhance the learning and better practices of the art of beekeeping within our community.

November 2016



Scott Watson. 2016 Club photo competition entrant

Meetings: 3rd Thursday of each month
7.00pm for 7.30pm start
Venue: Senior Citizens Building.
895-901 Doncaster Road Doncaster East.
Melway 47k-1.
Opposite Dan Murphy's.

***** Guests and Visitors Welcome *****

Next Meeting: Thursday 17th November 2016

Guest feature: Stewart Gould, Somerton Beekeeping Club
(British Beekeepers Association)

Main Presentation: Flow hive Q&A hosted by Stuart Anderson (co-inventor) live via Skype

Club Members' Meeting

Enquiries and information: editor@beekeepers.org.au

Upcoming Events

December 15th 2016
CHRISTMAS PARTY 2016

Keep an eye on the website for updates and amendments

February 1st 2017
BEGINNERS COURSE

Starts 1st February at the Club Rooms, hands on practical at 33 Saxton St East Brunswick
Details on website

February 4th 2017

MICROSCOPY WORKSHOP

1 day course
33 Saxton St East Brunswick

JUNIORS CLUB.

Next meeting.

Saturday 19th November 2016, 10.00am
33 Saxton St East Brunswick.

Opening the hive looking for FEDSS. Food, Eggs, Disease, Space and Swarming.

We will be going through all boxes of the entire hive. Bring your bee suit and gloves.

Bee Folklore, Myths & Legends

Middle age English folklore was if a bee flew into your house, it meant that someone was coming to visit. If you killed the bee, the visitor would bring you bad news.

In Britain, when a daughter of a beekeeper gets married, he has to announce the marriage to the bees. They say that if the beekeeper doesn't tell the bees the bridegroom's name and other information properly, angry bees will sting people indiscriminately.

Again, in Britain, when a beekeeper has passed away, details of the death are explained after hitting a beehive three times with a house key. Then the beehive is covered with a black cloth which symbolizes mourning. It is said that if they neglect to follow the procedure, sad bees will fly away from the beehive or "follow their master to the grave."

Both of these examples show a psychological relation to bees in Europe where beekeeping is popular.

There was an old custom in Central Europe of brides walking their partner past a beehive or nest to test the future faithfulness of their husband to be - if they were stung it was curtains for the marriage idea...

Oddball Bee Mutations

Visible mutations are most often seen in drones. Since drones develop from unfertilized eggs, they have only one set of chromosomes. All recessive genes are expressed in drones, none are hidden by a second, dominant gene



This eye colour variation changes from light yellow to dark red over time.



A different recessive gene gives bees white eyes. White eyed bees behave normally up until they are old enough to take their first flight.

Once they fly, it's obvious that they are sightless, flying wildly in circles, they rarely return to the hive

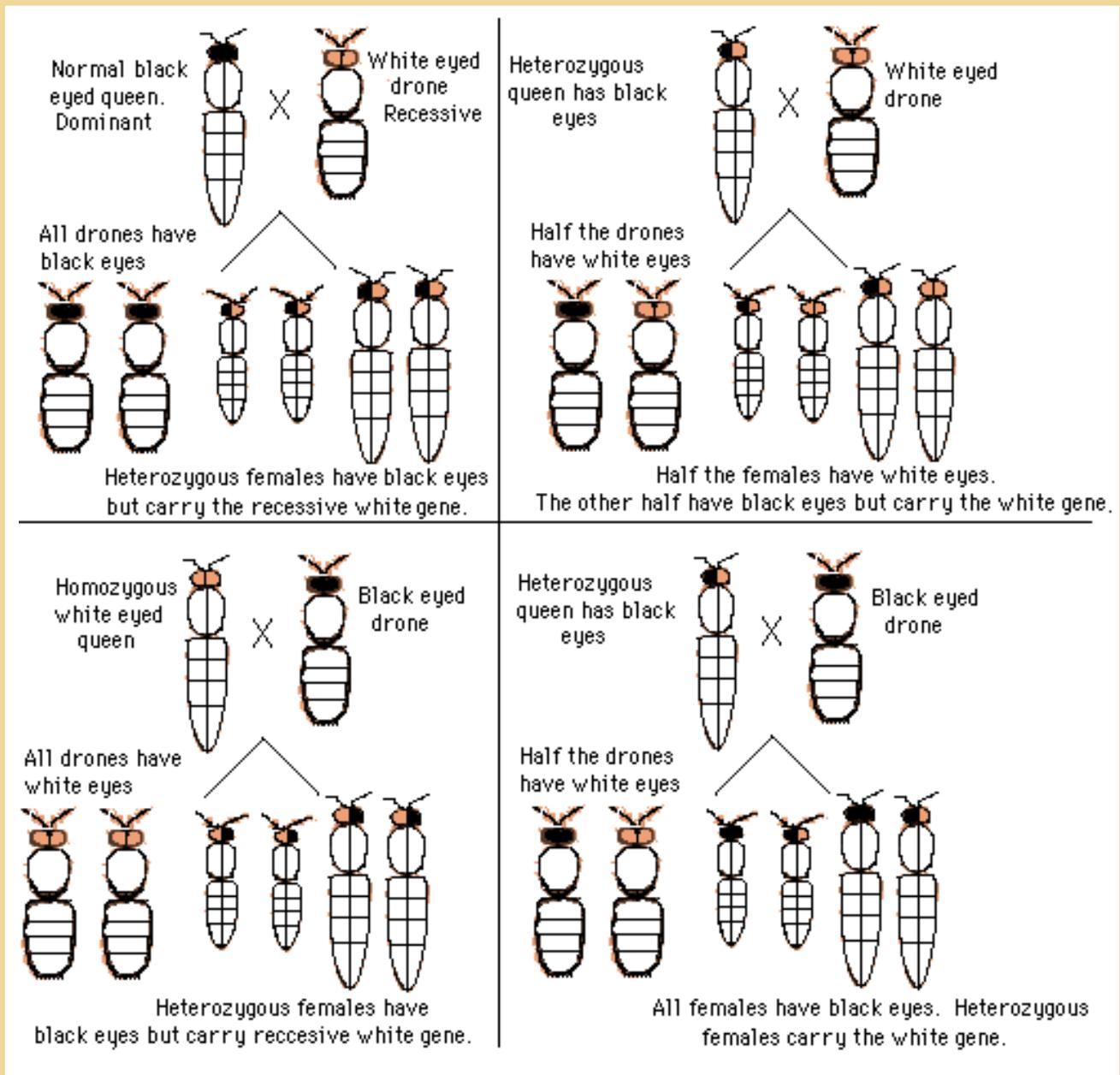
Normal coloured "wild type" eyes



If both mother and father contribute a white eye gene, white eyed workers and queens result.



Possible combinations of white eyed bees



Acknowledgment to Glenn Apiaries for text and images.

Glossary

Allele - Alternative form of a given gene (e.g. black eye, white eye)
Homozygous - having two of the same allele (e.g. two black alleles)
Heterozygous - having one each of two different alleles (e.g. one black & one white allele)
Recessive gene - a gene that can be masked by a dominant gene. In this example, the recessive gene is the white eye

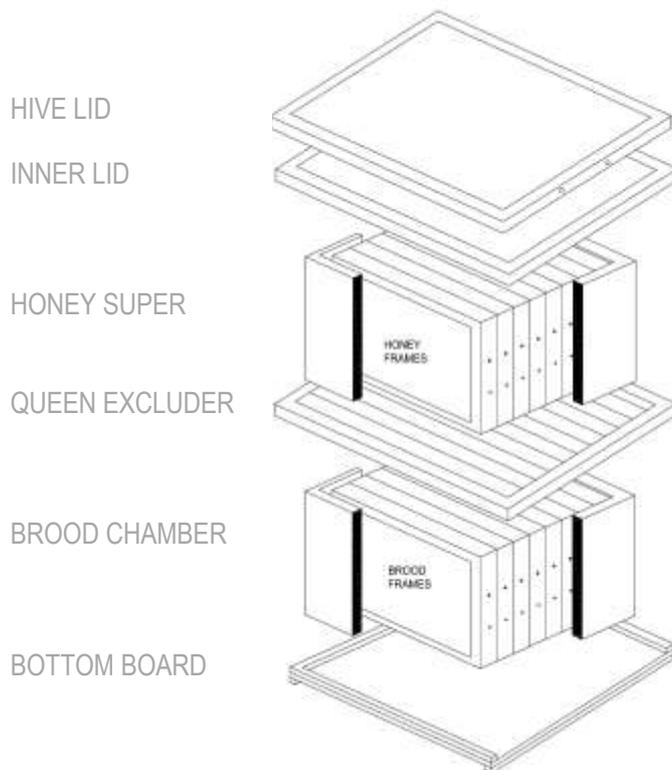
Of the almost 5000 registered beekeepers in Victoria, controlling 110,000 hives, 1500 have registered since 2011, indicating one of the fastest growing beekeeping involvement of all the States in Australia.

Russell Goodman, Agriculture Victoria Senior Apicultural Officer has retired after 51 years of service to the industry. Russell has written 2 books both of which we have in our club library. The first co-authored with Peter Kaczynski "Beekeeping in Australia" and the second "Honey Flora of Victoria" have been very successful having a number of reprints. Incidentally, these books can be downloaded free from RIRDC website.

Our best wishes go to Russell for his well-earned retirement.

Assemble and maintain a hive

A typical hive consists of:



The bottom board supports the hive. Ideally it should be mounted off the ground on bricks or suitable stand a minimum of 100mm from ground level. The hive entrance is provided on the board. Ideally you should include an entrance closer for use when moving.

The board is surrounded by a 9 -15mm riser on three sides to provide a space under the frames to allow a space under the frames for bee movement. The brood box sits on the bottom board risers.

A queen excluder to keep the queen at the bottom of the hive is placed on top of the brood box. This will ensure that there is no brood in the honey super above. The excluder can either be a wire grid or plastic with narrow slits to enable worker bees to move through but too small for the queen. On top place a honey super. Supers are the additional boxes that can be placed on top of the brood box as the colony population

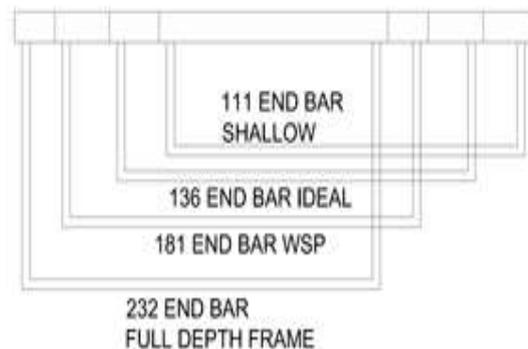
Box sizes.

All boxes are 500mm long. The size of the box depends on the depth and width of the box: an 8-frame box is 347mm wide; a 10-frame box is 400mm wide. The depth of a box varies from 9 to 12mm deeper than the measurement of the frames.

Full depth box	244mm
WSP box	193mm
Ideal box	147mm
Half box	122mm

The accepted industry standard for a full depth frame is.

Top bar length	482mm
Bottom bar length	448mm
End bar length	232mm
Width of end bar	35mm



increases. The three common size types are full 8 or 10 frames, Ideals or WSP.

Each box contains a series of frames that contain combs made from beeswax. You can remove and replace the frames without destroying combs or killing bees.

The hive is finished with a lid, usually insulated and covered in a sheet metal finish. Remember to fit or use hive straps, emlocks or clips for holding all hive components together when moving.

The width of the box refers to the number of frames that can be placed in it. The two common sizes in use are 8 frames and/or 10 frames.

Swarm season

We are now in the heart of the swarm season and with the better weather it is important to check hives weekly or 10 days at the most to check hive conditions and look for signs of swarming and food supplies. With the weather we have been having, do not assume your bees will be ok for stores. I have heard people have had to feed some colonies recently while others are saying they are getting good honey flows, every area it seems is different.

With the advent of longer daylight hours, warmer weather the Queen egg production is rising to a peak, therefore the brood nest is growing at a faster rate, resulting in rapid increase of bee numbers. This is the cause of the high likelihood of bees raising queen cells in preparation of swarming.

Even though you may see capped honey frames, I would be cautious in taking any just yet. If space allows leave them for a few more weeks until warmer weather consolidates. But do remember to leave space for bees so if you do have to make room take just 1 frame out, and review again next inspection.

SWARM COLLECTION

The Beekeepers Club Inc., provides a list of association members willing to undertake the collection of swarm bees, as requested by members of the public. If you are interested in being involved in swarm collection, please add your name, details and if you ask for a fee, to the swarm list on the website.

If you are unsure of the process email Andrew Wootton secretary@beekeepers.org.au with all your details and Andrew will put you on the list.

The cost of and timing for removal of bees shall be a negotiated arrangement between the beekeeper and the person requesting the removal. Any contract between you and a client is your responsibility and does not involve the club. The Beekeepers Club Inc., accepts no responsibility or liability in all cases.

MENTORS NEEDED

A number of members have indicated a willingness to mentor new member beekeepers. If you are experienced, able and willing to assist with the mentor program, please email committee to include your name on the list. More mentors are needed.

If you require mentoring, please email committee@beekeepers.org.au and we will endeavour to match you up with an experienced person.

BUY SWAP SELL

Any member with excess equipment, stock or etc., may use the newsletter to advertise those articles for sale or exchange.

Email editor@beekeepers.org.au with full details to be included in the next available edition.

Signs of swarming



Looks like this



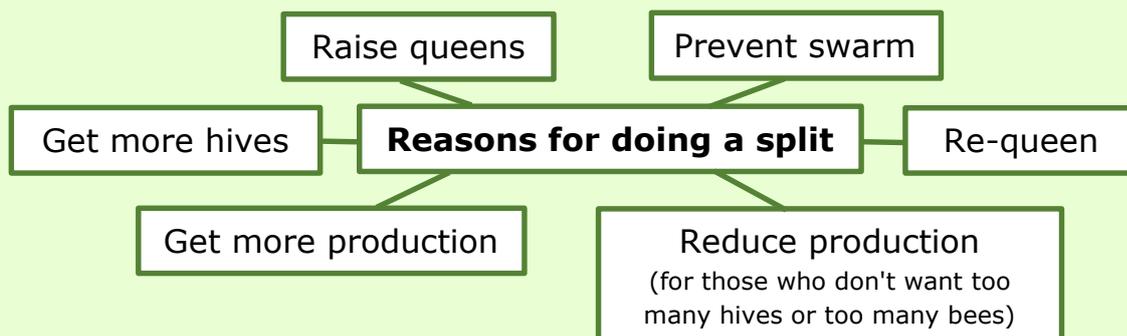
May lead to this

Main Signs of Swarming

- Queen cells under construction (these will generally be on the lower and side edges of comb)
- The construction of queen cell cups (like acorns), swarming will generally occur if the cups contain eggs or larvae.
- The signs as above will usually be accompanied by a lack of comb space for brood rearing and high worker and drone population.

Above all, congestion in the hive is a major cause of swarming. So, placing another super and frames on top will not stop a swarm if the above signs have been observed.

If you detect a large population and space is becoming short, and the above signs have not materialised then the extra super and frames may assist in the short term, but at some stage you may have to split your hive



LIBRARY

New books have arrived in the library for members to take advantage of this great resource.

To ensure all have a chance to share these books we ask that you only take a book for one month before returning.

If you hear about or come across good beekeeping reference books let Helmut know and we may be able to purchase copies.

We also now have current copies of the Australasian Beekeeper (ABK) and American Beekeeper Journal in the library.

What is a Nuc?

Nucs, or **nucleus** colonies, are small honey bee colonies created from larger colonies. The term refers both to the smaller size box and the colony of honeybees within it. The name is derived from the fact that a **nuc** hive is centred on a queen, the **nucleus** of the honey bee colony.



How to do a split:

The common process is four or five frames from an existing hive are transferred into an empty nucleus box as follows:

1. Make sure the queen is not on the frames transferred into the nuc.
2. Ensure a good quantity of nurse bees gets transferred to the new nuc.
3. Transfer one or two frames with honey into the nuc, starting on both outer sides.
4. Transfer one or two frames with mainly capped brood next to the honey frames.
5. Transfer one frame with freshly laid eggs into the centre of the nucleus.
6. Shake a few more bees from other frames from existing hive onto the frames in the nucleus to maintain a good quantity.
7. Double check the queen has not been transferred into the nucleus.
8. Close the lid on the nucleus and place it at least a metre away from the original hive.

Selecting the queen cells

Six to seven days after the split you need to check all frames in the nucleus for queen cells and remove any queen cells that are already capped, provided some uncapped queen cells with a queen larva inside remain on the frames.

When we created the split, the bees in the nucleus, being without a queen, may have panicked and started building "emergency queen cells" to raise a new queen. By doing so, they might have built some cells with a larva inside already 2-3 days old and may have been on its way to become a worker bee. Although a larva raised in this way would still develop into a queen, chances are she would not become a very strong or productive queen as she has most likely missed out on the protein-rich Royal Jelly food a queen larva is fed throughout her development.

Larvae of female worker bees are fed Royal Jelly for a day and a half, then their diet changes to "bee bread", a mix of honey and pollen, prepared and fed to them by the nurse bees. Larvae of queen bees are being fed Royal Jelly throughout their entire development until the cell is closed 7 days after the egg was laid.

If after six to seven days you find a closed queen cell, that means the larva inside is more than 7 days old and was on the way to becoming a worker bee before the emergency queen cell was built for her.

You will may have to intervene and kill the first queen emerging under these circumstances as she is the first queen emerging from the emergency queen cells and thus having the smallest amount of Royal Jelly will not be as strong as the as yet unborn queens from the new cells, although as first born she will kill off the more likely stronger candidates.

Raising queens by splitting a hive can only produce good quality queens when the weakest candidates are removed before they emerge.

This has to be done exactly six to seven days after the split - if done too early, none of the cells would be closed - if done any later, all queen cells would be capped and there is no way to determine which ones are going to be the better queens.

Flow Hive Beekeepers

A new section in the newsletter, devoted to the Flow Hive and Flow Hive beekeeping, is being planned. Input from our flow hive members is invited. So, if you have suggestions or just want to share your Flow hive experiences email editor@beekeeping.org.au for inclusion in this new section.

As there a number of Flow members who are fairly new to beekeeping, this first section reviews some of the points discussed during our recent Flow course.

- ✓ Check the hive has a slope towards your honey outlets.
The hive should have a 2.5 to 5-degree slope towards your honey outlets. You can check this with a level or simply make sure it is visually obvious that it has a good slope. Some kits may have a slope built into the bottom board so if this is the case with your kit just ensure *it is placed on a level surface*.
- ✓ Make sure the baseboard corflute slider is in the top slot.
The top slot pushes the corflute against the mesh so that any dribbles of honey that may occur *stays within the reach of the bees*.
- ✓ Be sure your tubes are inserted correctly.
The little tongue on the end of the tube goes into the flow frame and blocks the honey leak back point.
- ✓ Check each flow frame you are harvesting is ready and capped.
Look in the end frame view, if cells are mostly full and capped with wax, it is a good indication that it is ready for harvest. The best way to get to know what the end view means is to open the hive and inspect the flow frames. Remember to do this you will need smoker and protective clothing.
- ✓ Have a pair of pliers in your tool kit.
Sometimes the end caps can be tight fitting, pliers will allow you to remove them easier.

The November meeting will include a Q&A session via skype live with Stuart and Cedar Anderson.

I urge all members, particularly those with a Flow Hive, to prepare and have questions ready to ask, this will be a fantastic opportunity to speak directly to the inventors and get a firsthand lesson on flow beekeeping.

To those of us who do not have a flow hive, it will also be a good opportunity to ask any questions or concerns that you may have.

Remember you still need to carry out your weekly – 10 day brood box inspections during the swarming season to check your hive for signs of swarming, check brood look for disease etc. You can sight the stores situation ok with the flow hive but you still need to conduct your bee husbandry checks like all other beekeepers. Once we pass the swarm danger period by early mid-December checks can be relaxed to about every 3 or 4 weeks.



WANTED – FLOW HIVE ARTICLE

Any member with a flow hive interested in writing a small 200/300-word article for the newsletter about their experiences and beekeeping exploits with the Flow hive.

There a number of owners within the club so it will be interesting to get some firsthand feedback on how they are progressing, as well as sharing their new-found knowledge.

Queen raising course

10 members attended the two day Queen Raising course held weekend of 5th and 6th November.

The course included grafting, bee genetics and principles of queen raising. It was capably run by Andrew Wotton and Mat Lumalasi.

Queen rearing allows you to propagate from your best stock thus improving your apiary.

It is cheap and an important skill for beekeepers to develop.

Grafting is straightforward and should not be intimidating.

The course highlighted the biological principles of queen rearing, introduced the genetic concepts, summarised the various methods of rearing queens and conducted practical exercises in grafting and starting queen cells.

Students gained hands on experience of the steps and will be eligible to receive a capped queen cell 10 days later to use in their own hives

The team hard at work.



Andrew inspecting queen cells on the Sunday

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