

Beekeepers Association of the ACT

Newsletter of the Beekeepers Association of the Australian Capital Territory Incorporated

Meetings of our Association are conducted on the 3rd Thursday of every month (except December) at the Yarralumla Primary School Hall, 24 Loftus Street, YARRALUMLA, ACT 2600

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> > November 2015

#### Next Meeting

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Splitting Hives

Update from Ron Hoskins-Swindon Honeybee Conservation Group

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Classifieds

#### Next meeting Thursday 19 November 2015 at 7.30pm

The club meeting with commence with a briefing by ACT Government representative, Rachael Taylor, on plans for beekeeper registration. This will be followed by a talk by member Cormac Farrell about Nectar and Pollen Resources from the Canberra Urban Forest. For a change, we will finish the meeting with any questions in Beeginners corner.

Please make a note in your diaries for our **Christmas barbecue** which will be held on 17 December (in lieu of our regular monthly meeting at Yarralumla). We plan to hold this event at the Jerrabomberra Wetlands site, commencing at 6 pm. For most of you this will be the first occasion to view our new apiary.

Details of what to bring and how to get there will be posted on our website and be in the December newsletter.

#### President's Report

Dear members,

I am pleased to report that the ACT Government recently introduced a bill into the Legislative Assembly which sought an amendment to the Animal Diseases Act 2005. This bill, referred to as the Animal Diseases (Beekeeping) Amendment Bill seeks to introduce registration of hives with the registration protocol expected to be predominately aligned with the registration regime as applied in NSW. The

period of registration will be for three years and beekeepers will be required to have brood boxes annotated with their registration number. Records on buying and selling bees are to be kept by the beekeeper. Declarations already exist for bee diseases and pests although this information is subsumed in the following instruments:

1. Animal Diseases (Exotic Diseases) December 2011 (No 1). Note: this declaration refers to pests and includes Varroa destructor and Varroa jacobsoni, and

2. Animal Diseases (Endemic Diseases) 2014 (No 1). Note: this declaration refers to pests notably AFB and EFB.

We have also sought to meet with the Chief Veterinary Officer (Dr Wendy Townsend) to discuss both the new legislation from a bio-security perspective and the Association's implementation of the National Bee

Pest Surveillance Program within the ACT; this program is sponsored and funded by Plant Health Australia and the ACT government has also offered to assist in financially supporting this initiative. I have been advised that the bill is expected to be debated next week. Be assured that details of the bill and associated instruments will be posted on our Website (Forums) once the bill has been passed. You will appreciate that the necessary mechanisms for enacting the proposed 'registration' system (forms etc.) have yet to be announced and we are working closely with government staff to facilitate the introduction of a robust administrative system; it is in our collective interests to have a registration system that will work and hopefully underpin an effective bio-security regime for the ACT. The government's principal point of contact for registration is Rachael Taylor who is the Senior Manager, Legislation and Legal Services. Rachael has kindly accepted our invitation to briefly discuss 'registration' at our November meeting.

On the training front our tutor group successfully completed the first CIT Backyard Beekeeping course. Supporting and administering these courses requires a substantial commitment and I wish to acknowledge these efforts and thank all those tutors who participated in our first of three CIT beekeeping courses. Worthy of note is that the Association receives \$1200 for the conduct of each course.

Our apiary at Jerrabomberra Wetlands is progressing well and our Association is indebted to the efforts of Jeff Matsen (Hive Manager) and Steve O'Hearn who have individually expended many hours of their personal time to make this apiary one of the best training apiaries in the country. I also wish to acknowledge and thank those of you referred to as 'Hive Buddies' who have participated in hive management activities and materially assisted Jeff in maintaining both the Wetlands and CIT apiaries.

In closing, how well is this season faring? So far I am having mixed results. Only one of my hives located in Kaleen has produced a super of honey. However, two of my hives in Ainslie are only recently improving from a 'nectar' gathering perspective and contrary to what I would have thought for hives backing onto the Mt Ainslie reserve. I am hoping as our season progresses these colonies will fare much better. I fully understand that with hobby beekeeping one cannot presume how good a season is going to be, after all, isn't meant to be about the bees and what we can do to help them survive and prosper.

I look forward to catching up with many of you at our November meeting.

Regards

#### John Grubb

#### 'Splitting' Hives

By the time readers receive this Issue, spring will be well underway, the brood nest will have expanded and hives should be booming. Now is the time for beekeepers to give thought to increasing their hive numbers, even if it is only from one hive to two hives.

There are some good reasons for doing this.

- 1. When I started beekeeping, Bruce Ward said to me, 'It is always easier to keep two hives than one. If one queen dies, you can take eggs from the good hive, give them to the weak hive, and have them start another queen in order to get them up and running again. If you only have one hive and the queen dies, you're stuck with empty boxes.' Not quite that simple, but the principle is spot on.
- 2. Well into spring, a crowded hive is at risk of swarming. Splitting the hive reduces the risk. The second hive can, if needed, always be reunited back to the original. No harm has been done, but more likely, some good.
- 3. Expanding your hive numbers, even slightly, increases your commitment to your bees. You are more likely to look after them if you have a greater commitment. After all, who wants that new hive, which you have just put all that effort into starting, to die out. Plus it will give you more honey and more enjoyment.

So how best to go about this 'splitting' hives? The following details one method that <u>has not</u> worked, and two methods that <u>have</u> worked well for me. Plus a third that also works, but is separated from the other

two for reasons that will become obvious. Bear in mind that splitting of hives should only be practiced when pollen and nectar are coming in (ie when conditions are ideal for colony expansion.) There is an article later in this Issue about 'summer splits'.

#### The Less Successful Method

When I got my first hive, I split it in half to get two. I had started with a single box of bees, 8 frames. I bought some new frames and foundation, the extra boxes and base/lid to double my hive numbers, and ordered a queen. When the queen arrived in the mail, I then split the hive in half, put half in the new box, wasted a lot of time working out which box the queen was in, then added the new queen to the second box, filled both the boxes with foundation and let the two hives expand into the two boxes.

All good. But very slow. Takes time to get the foundation drawn into full comb, and more time for the queens to lay eggs, more time for the bees to hatch. All the time struggling to expand with a small field population.

*But when you only have one hive, probably the only method you can use.* Why? Because you don't have enough resources (as in bee numbers or drawn comb) to do otherwise.

The whole process of expanding this way can be accelerated by feeding sugar syrup, in amounts that the bees can take up in two days max. Wait a day or two, then feed them again. The sugar syrup will stimulate egg-laying, the bees will be stimulated to collect pollen for brood raising, 'Bob's your uncle'. If good pollen is not available, a pollen substitute will help, but be aware that small hive beetle has to be considered.

#### The More Successful Methods

#### Method A. Three Hives from Two

This is the method I usually use – it is a little slower, but has the highest rate of success. The parent hives only suffer a momentary setback, while the new hive starts off life with a reasonable complement of bees – this enables it to kick on quickly. For every two hives you have, an extra hive can be started. The frame positions stated below assume 8 fr boxes are being used.

- 1. Have your new queen (s) ready to go.
- 2. Take a frame of honey (and pollen if possible) from the first 'parent' hive, complete with bees. Place it against the wall of the new bottom box. Replace with a frame of drawn comb, or foundation if necessary.
- 3. Find the queen in the first parent hive. Set her and the frame she is on to one side.
- 4. Remove two frames of brood, *together with all the bees on those frames*, and install them in the new bottom box, in positions 2 and 4, with a frame of drawn comb (or foundation) in between them.
- 5. Replace the frame of brood with the original queen, back into her own brood box.
- 6. Replace the frames taken from the parent hive with two frames of drawn comb (or foundation) in positions 3 and 6.
- 7. Repeat the whole process above, from steps 2-5, with the second parent hive.
- 8. The two parent hives have each now 'donated' 2 frames of brood and 1 frame of honey/pollen, together with the bees that were on the 3 frames. The bees that were on the brood frames will be mostly young bees, capable of feeding the brood, (as well as the new queen) and the bees on the frame of honey should mostly be older field bees. This means the new hive has a goodly number of bees, and has a 'balanced' population of young and old bees.
- 9. The new hive now has 6 frames of bees, with 2 frames of honey, 4 frames of brood, and two new frames (into which the new queen can lay eggs immediately, or which can be drawn into full depth comb very quickly).
- 10. The order of frames in the new hive should be
  - a. Frame 1,8 = Honey/pollen
  - b. Frame 2,4,5,7 = brood
  - c. Frame 3,6 = new (or drawn) comb

- 11. The new hive can be set in its new position, or (if possible) moved 5 km away for a few days. This will ensure a minimum of the older bees will return to their original parent hive, but this is entirely optional, and I do not consider it to be a big deal.
- 12. The new queen can now be installed into the new hive. I usually place the queen cage between the brood frames at positions 4 and 5, in the centre of the brood nest. It is probably better to wait a couple of hours before installing the queen, but as a commercial beekeeper this was often a luxury that time did not afford me. Rather I set up all the new hives in that yard, then immediately went around and inserted all the new queens. Sometimes I would set up the new hives, then return home for a night to pick up the new queens, then go back the next day to install them. The rate of success did not seem to change much either way.

Hobbyists often seem to fret about the idea that the frames of bees from the two parent hives will have a ding-dong set to and fight with each other, but I very rarely found this to be the case. I did in my early beekeeping days use the paper method to get boxes of bees used to each other (by inserting 1 or 2 sheets of newspaper between boxes of bees), but this was not going to work anyway in the method described above, as all the bees are going into one box. I am not saying it will not happen – just that I found it didn't happen, and I did not have to worry about bees from different hives having an argument when placed in a new box.

#### Method B. Two Hives from One

This method does work, but is probably better tried when the beekeeper has some experience, and is better able to monitor the development of both the parent and the infant hive. It is necessary to have a 'division board' for each new hive, and is probably best used to split hives later in the season, when honey production is not likely but when conditions going into winter look good – so that both parent and infant hives have time and the conditions needed to enable them to go into winter in a state good enough to ensure survival.

- 1. From the parent hive, remove all but one frame of brood, and the two wall frames with honey/pollen
- 2. If the old queen is found, leave her downstairs with the two frames of brood. If she is not found, no problem, **simply shake all the bees off the remaining brood frames**, shaking them into the brood box. This should mean the queen is shaken downstairs with the bees.
- 3. Fill out the old brood box with frames of drawn comb. It is too late in the season, using this method, to expect them to draw foundation, unless you are prepared to feed a lot of sugar syrup.
- 4. Set up the new hive above the excluder, with two frames of honey, the 5 frames of brood taken from downstairs, and one empty drawn comb (in position 3). **Do NOT at this stage insert the division board**.
- 5. Leave the hive overnight. Nurse bees will move up from downstairs to look after the brood, and some older bees will also move upstairs.
- **6.** The next day, insert the division board. This is a board that has shallow risers, to imitate a bottom board, and has an entrance that need only be 100mm wide, facing in a different direction to the parent hive (to one side or to the back). Older field bees will use the new entrance to leave the hive, then probably fly back into the original parent hive. The result is that the new hive is sitting atop the old, with a division board in place, and containing mostly young bees.
- 7. The new queen can now be installed in the new hive upstairs.
- **8.** The old queen will have enough young bees to look after her, plus all the field bees from the parent hive. She will re-establish her full brood nest within a month. (Remember I said you need time and good conditions late in the autumn to allow this to happen).
- **9.** Any box of honey that was on top of the old hive should be left with the old hive, underneath the division board.
- 10. After a couple of weeks, check both the old hive (to see how the old queen is going with reestablishment of the brood nest) and the new hive (to check the new queen is laying). If for some reason either queen has not 'worked' the two hives can be re-united. No real harm has been done, and the hive will still be in good shape for the winter. If the new queen has taken, the new hive can be placed on its own bottom board for the winter and monitored to ensure it will go through winter as a strong single, or it can even be left on top of the division board for the winter.

I have taken such hives through an entire winter on Spotted gum on the South Coast on one occasion, making honey from both top and bottom hives. It was a lot of work, as I had to lift two boxes off to get at the lower hive, but at the time I did not have enough bottom boards ready for the new hives.

#### **The Fourth Method**

This is not really splitting, but does enable colony expansion. Get your name onto a 'swarm list', as being someone who is willing to collect swarms. This is one of the benefits of being in a beekeeping club, as they often maintain such a list to help the local council (who may maintain a list themselves if there is no local club.) Usually you can indicate which areas you are willing to collect swarms from, and how many swarms you are prepared to collect that season.

A good club (or council) will go through the list, giving everyone a chance to get a swarm, before going back to those who want more than one swarm.

You are thus providing yourself a ready source of extra bees, as well as a community service. In the early days, I went from 3 hives to 11 hives in one season, simply by collecting swarms.

#### by Des Cannon (The Australasian Beekeeper October 2012 Reprinted with permission)

#### An update from Ron Hoskins of the Swindon Honeybee Conservation Group

BBC South West produced a film in October 2015 showing the ground breaking work done by Ron Hoskins of the Swindon Honeybee Conservation Group over many years together with recent scientific findings.

#### https://www.youtube.com/watch?v=DUFDXI8VGvs

"Having achieved major successes we are now confident that we are able to selectively breed bees which mostly are able to fend for themselves against the Varroa Mite without mans' chemical interventions." <u>http://www.swindonhoneybeeconservation.org.uk/news/</u>

"In 1992, when Varroa mites were first discovered in Devon I attended a Ministry of Agriculture, Forestry and Fisheries workshop to learn more about the mites from their scientists. Among other things they advised the use of tobacco smoke and sticky floor inserts to catch falling mites, therefore controlling its numbers.

By keeping their numbers under control it was thought Varroa may not cause colony loss. However, tobacco soon went out of favour and other means of control were sought.



Subsequently beekeepers in Britain followed the lead of American and European beekeepers in what was already happening and began using a variety of chemicals, some of which are still being used today, like Formic and Oxalic Acids. Both of which can be quite dangerous to humans, and not very kind to honeybees. The mite has become immune to at least one favoured chemical, Pyrethroid.

Some chemicals are now to be found resident in recycled beeswax after it has been heated, cleaned and processed for re-use in beekeeping. One can only wonder about the same recycled beeswax being used in cosmetics, creams and soaps, etc. for human use.

Also at that workshop the Varroa mite was described as "*having a carapace like a crab*" and "*eight truncated legs like a crab*". At the time that description caused me to believe they were "*hard and bony like a crab*". I was wrong. I later found out that adult Varroa are covered in hairs, soft, fleshy and very

easily damaged. This I discovered almost by mistake in 1994 when I decided to collect some Varroa mites to photograph at home with my Pentax 35mm slide camera attached to my microscope. I inserted newspaper into the hive and allowed a few days for mites to fall onto it then removed and folded it. I stuffed it in my pocket and took it home. Upon inspection, not only were the mites covered with hive debris but they were also damaged. Certainly not worth wasting film on.



Though extra care was taken during later collecting I still found high numbers of damaged mites from one or two particular hives. It became obvious that the bees in these colonies appeared able to 'deal' with the mite and I needed to know how that was possible.

Following a couple of experiments I was able to prove the damage was being inflicted by worker bees biting the mites from each other. I was also able to determine this was a genetic function and not a learned activity. I used one exceptional colony for the start of a breeding program which has developed

over the last nineteen years.

Regular mite collecting and checking, using a 20/40 dissecting microscope, still takes place to enable improved selective breeding. Nowadays a very fine artist brush is used to gently collect and examine the mite in order not to inflict more damage. Collecting from a Varroa tray which has been in place for about three days is easy as there will be only a small amount of other debris. The damaged carapace or missing legs are very obvious. The last two years have been made easier for me as two colleagues now share the evaluation task.

In the 1980's I had been successful at instrumentally inseminating queen honeybees, nearly always accepted by their new colony. By 1995 my inseminated queens were no longer being accepted. The workers killed my queen and made one of their own. The only thing that had changed in my bee husbandry at the time was the arrival of Varroa and my use of chemicals.



Around the same time I had joined forces with a beekeeping friend. We had

about eighty colonies between us. We could do little about Varroa but the chemicals were different. We made the decision to stop using them. This decision has since been upheld by scientific papers. From them came the knowledge that most chemicals being used at that time, and which are still being used, were the major cause of queen failure due to their adverse effect on the viability of drone semen. They also cause several other problems, one being the life-span of the bees.

All our hives were relocated to a new site in 2004. They are now ALL fitted with Varroa floors; a wire mesh floor and deep removable under-tray to catch falling mites for later collection and assessment. Hives and trays are numbered for record purposes. Mites are carefully collected from the trays on a near-weekly basis making it easier to keep mites fairly free of hive debris and undamaged by us, placed into numbered mini-pots then examined under a dissecting microscope later.

#### (Phase 2) A new discovery was made

In the next two years about 50,000 mites were examined for signs of hygienic behaviour by the bees. Many thousands of them were found damaged, typically with carapace damage or legs removed. By 2014 around half a million mites had been checked.

In 2007 a new discovery was made. A colony was discovered where the worker bees seemed able to detect that Varroa were breeding upon the larval bees within capped cells. The cells were being opened

and the bee pupae being removed and discarded from the hive. My aged eyes are beginning to get the



better of me so I now needed a strong lens to find the mites. I purchased a 7x loupe with LED's.

During routine mite collecting I noticed that the Varroa tray of one hive had a central area completely clear of any hive debris. The mesh floor had a similar area above it where debris had collected and not fallen through. The floor was replaced for examination and cleaning. Using the new lens one of the first things I noticed were the almost transparent bee antennae (left). These had obviously come from immature bee larvae. I had not observed them before; the new lens made it possible now.

As these incomplete antennae are not to be found in other hives it suggested that the bees of this hive must be uncapping brood cells which contained Varroa mites and removing the larva and the mites.



The head of the pupae bee and its antennae are immediately behind the capping and would be the first parts to be tugged at by the workers. The woven wire screen floors allow some of these parts fall through onto the tray beneath The picture to the right shows a cell having been uncapped by worker bees.

Other colonies were found to be uncapping but not quite to the same degree.

When looking much closer among the floor debris I also found very tiny baby mites about I/6th the size of an adult. These fall from the bee larvae as they are being pulled from their cell. The picture (right) shows lots of very young baby mites with an adult mite for comparison. A very high number of baby mites collected from that initial hive in 2007/8 proved that this hive was really getting the better of Varroa. That colony was selected to play a major part in our future breeding programs.



#### Hygienic bee success

By now we had around 50 hives that have seen no form of Varroa control for many years, other than the grooming by the bees; no chemicals, shook swarm or drone culling. First the grooming and now the pupal bee removal causes a major set-back in the mite breeding cycle and dramatically reduces the potential build-up of mite population.

The adult female Varroa mite is capable of reproducing several generations; her daughters have the same potential. Therefore by the simple removal of baby mites and the grooming of adult mites, the bees have prevented a mite build-up of thousands. They are now independent and need no further help from me. My job now is to breed hygienic queens and distribute many more of them.

To date lots of drones and queens were bred and distributed around Swindon. Some were retained for our studies. Queens heading colonies not showing a high degree of hygienic behaviour are culled and replaced with queens bred from some of our better stocks . Read more here

http://www.swindonhoneybeeconservation.org.uk/about-us/

#### Beekeeper profile - John Johnston

#### What got you started in beekeeping?

My Grandfather, father and uncle were all Beekeepers. My Grandfather started when he had two hives sent out from England in the 1890s. My father was a beekeeper between 1940 until the late 1960s. He had between 120-150 hives. My Uncle also had bee hives, and he was one of the very first beekeepers to register his hives in 1932 when it became compulsory to register hives in NSW. He had between 80-90 hives. His property was then an orange orchard in Martinsville near Morisset NSW. His son and grandchildren still live there and they still have bees, not as many, but enough to keep him on his toes.



John Johnston & Club Treasurer Dick Johnston

#### Did you have a mentor?

I consider my grandfather, father and uncle to be my mentors. They taught me so much about bees, the hives and other aspects to beekeeping.

#### When did you get your first hive?

My father gave me my first nuc box back in 1948 and the passion grew from there.

#### How many hives? What kind?

I mainly have 8 framers. At the moment I have several hives in my backyard and 20 on a mate's property. They are mainly from swarms we collected this year as I am on the swarm list for the Association.

#### Do you have an empty super story?

Yes. In 1952 I attended a course at Hawkesbury Agriculture College and the course was on "HYGIENE in HIVES. The instructor went through the important aspect of bees and hygiene and towards the end of the course asked if the class had any questions for him. One bloke asked "why do you need to do all that? " To which the instructor replied, "Well would you like to live in a dirty house?" The bloke answered "no". " Well said the instructor, neither do bees." The bloke then asked the instructor if he could bring his box in from the car for the instructor to examine. **'Oh boy'**......if you could have seen the hive.....it was filthy. The instructor was astounded by the condition and said "I wouldn't put a swarm of blow flies in that". To this day it is one of my favourite sayings.

#### What is a good tip for a novice beekeeper?

Keep boxes and frames clean. Paint boxes every 4 or 5 years eliminating water leaks. Don't use cheap inferior equipment, it might save money in the beginning but it will cost you more further down the track. **MAINTENANCE MAINTENANCE MAINTENANCE** 

Start off with Italian Queens they are reliable and good workers. Don't use exotic breeds of Queens it doesn't work, believe me I have tried them.

#### Your most memorable beekeeping moment?

One year my father had his bees out west near Grenfell on Yellow box. He used to breed his own Queens in 8 frame working hives. (No excluders in those days)

There were 2 Queen Cells in this one very strong hive, somehow the hatching time got mixed up and they swarmed, my father nearly cried. They didn't settle nearby they just took off so I chased the swarm for about 1km, (very flat country out there) it finally settled high up in an old gum tree where there was a ready-made hole and in they went. I had to go back to the camp to tell my father the bad news. Another year, again near Grenfell, was one of the best seasons for honey. The Yellow box was out in force. When you walked under the trees, the leaves would actually stick to your shoes, the trees were literally dripping with honey. I have never seen so much honey as then and I haven't seen it since.

#### The most useful gadget you have?

My frame wiring board. I made it 25-30 years ago; it still churns out the frames.

#### Something you invented?

No new inventions to speak of, but I think I have made some improvements to my hives. I glue then screw top and bottom bars on frames. I use aluminium angles on my lids and bottom boards to prevent the em-locks from bruising the timber and tin. I also paint the inside of my boxes.

#### Your favourite aspect of beekeeping?

I get great enjoyment from placing a very small weak swarm into a nuc and nurturing it to a strong productive hive. I keep my hives and equipment in top shape. I also enjoy helping fellow beekeepers.

#### A recommended plant for bees?

Lavender (English), they love it.

#### Your favourite honey?

My favourite honey is Yellow box and Patterson's curse.

#### Anything else?

Don't assume you know everything about bees, there is always something new you learn every day.

#### A New Meadery in Murrumbateman

There is a new meadery in Murrumbateman. As beekeepers, you would probably be among ten percent of the population who knows what mead is. Mead is honey wine, and there are many different kinds and combinations of fruit and honey mead that you can make.

Michael and Maryanne Devey recently moved Wins Creek Meadery to the new premise located in the historic Travellers Rest Inn in Murrumbateman. This is an exciting opportunity to expand our boutique microbrewery, Michael says. Wins Creek has been making mead for about ten years and selling it



commercially at the Capital Region Farmers Market since 2012. They also make apple cider and craft brewed soft drinks, ginger beer and root beer.

The Meadery also operates as a cafe/restaurant, with a focus on natural, whole and local food. Mother and daughter team, Maryanne and Joanna (16), have been doing an exceptional job preparing the meals. Don't be surprised if you see them on My Kitchen Rules. The café features gourmet coffee, meals and a selection of homemade cakes and sweet fare. We use fresh regional produce that reflects the changing seasons, and our meat is free-range and sourced from local producers, Maryanne says. Tasting platters are available to complement our mead, or if you prefer, one of the cool climate wines this region is noted for.

Wins Creek Meadery is open Thursday to Sunday, 10 am to 4 pm. As it starts to warm up, there are plans to stay open later on Friday and Saturday nights. You can dine by one of the two open fires in the historic cottage in winter, or outside in the alfresco courtyard in summer. Wins Creek is a Honey Provedore, featuring their own handcrafted and award winning honey, as well as honey from selected regional and Tasmanian producers.

#### **Does Wins Creek Meadery Have a Ghost?**

Old buildings often have ghosts, and according to Michael, there is a ghost at Wins Creek Meadery. Not wanting to frighten off any customers, I won't give details. If you're curious, come out sometime on a cold winter's night. You can sit around the open fire, sip a few meads, and Michael can tell you the stories. It's not for the faint hearted.

#### Fix and Make Market

Dermot and Sarah Asls Sha'Non waving the flag for bees and the ACTBKA at the FixandMake Market at Hotel Hotel.

http://hotel-hotel.com.au/fixandmake/





#### Honey Extracting course

The next course to be run at the Wetlands facility will cover Honey Extraction techniques.

This course will be presented by Dermot & Sarah Asis Sha'Non.

They will be explaining and demonstrating the different methods used to extract honey and honeycomb from traditional Langstroth frames using a centrifugal honey extractor and non-wired comb extracted from feral, Warre and Top Bar hives using a wax press.

You are also invited to view the Wetlands Apiary and check out the different hive configurations that are being established. Date 22nd November 2015, 10:00am - 12noon

Places are limited, so click this <u>link</u> to go to the booking page and reserve your place. <u>https://bookwhen.com/actbka</u>











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