

## 2015 Bee Splitting Season

Preparation for the 2015 splitting season began in earnest in July with the assembling of materials. 200 OATH (Original Australian Tetragonula Hives) were built by the St Ives Community Shed and 500 19L foam boxes were ordered from Polyfoam and subsequently painted, with the help of the WildThings NSW Committee. We already had about 100 empty OATHs left over from last year. Due to limited logistics and resources it was decided that 300 splits would be our 2016 target.



Some of the 500 foam boxes after being painted

Splitting was to start in the first week of September and Ku-ring-gai was divided into 39 areas. Every property was contacted with a provisional date for splitting, giving residents the opportunity to view the split and/or, to organise access to their property.

Two splitting teams were created, led by myself or Liz Gibson with help from volunteers, mostly from the WildThings NSW committee. Each week we planned to average 6 areas, inspecting 72 hives.

An annual inspection is a good idea as problems, such as a hive that has failed to re-queen but is still alive, or a hive that is damp because of water potentially getting into the foam box, can often be rectified.

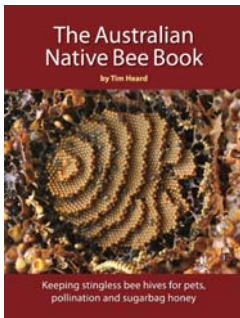
Sydney in 2015 had a cold winter by comparison to previous years and straight away it was obvious that there was a problem, too many hives were not ready to be split. We were not prepared for only one third being able to be split.

When WildThings first began splitting we would split a hive only every second year, however a succession of warm winters and generally good seasons had encouraged us to think that most hives could be split annually.

By the end of the first week less than 50% of hives inspected were split, the majority were healthy, but didn't have brood in both halves of the OATH. The target of 300 hives was beginning to look unachievable, it was time for Plan B.



Ku-ring-gai divided into zones



I rang Tim Heard, author of “The Australian Native Bee Book” (and native bee legend), who suggested delaying splitting for a month would give the hives an opportunity to recover from their winter hiatus. Consequently the splitting season was put off until October. This turned out to be an excellent decision as the percentage of splits in October went up from the September average of 40% to 68%

## Innovations

The word slump will never be uttered at Ku-ring-gai again because every split is upside down.

The means that the top half of the hive is turned upside down and becomes the new bottom half of the hive.

This image below on the left shows a hive ready for the new tops after being split. The bottom right image shows the two new tops in place.

The top half of the original hive (which is now a bottom) doesn't have an entrance, so the hive entrance is now on the top of the OATH rather than the bottom



No longer a top and a bottom, just 2 bottoms.



## Honey collectors

Ku-ring-gai sells hives as a cost recovery initiative and has decided to concentrate on selling hives with honey collectors as well as standard hives. The system we are currently using is a middle section with a piece of ply acting as a queen excluder, (the left image) and the finished hive with a third box on top of the middle section, which sometimes also provides the entrance hole to the hive.



The honey collector hive is now too big to fit into a single foam box, so we have to use 2 foam boxes. This set-up with 2 foam boxes is particularly prone to water infiltration, my unproven theory is that masking tape is not water proof.



## Mesh

This year we reduced the size of the stainless steel mesh to 1.67mm aperture down from 2.5mm. This definitely helped stop Small Hive Beetle, the major issue being how long to use it. The bees don't like the mesh so typically we keep it on only for a couple of weeks.

## More brood please

Another change we made was being more conservative with our splits. The vast majority of the dead hives we came across in 2015 had failed to re-queen, therefore we quickly decided not to do any more splits with minimum brood, something we did quite a bit of in 2014—a heroic experiment to ascertain whether a split with minimum brood was possible.

## Things we hate:

The foam boxes. The foam boxes are essential to protect the hive from extreme hot temperatures but have the ability to hold water. Drainage holes help, but we don't put them in straight away because we don't want Small Hive Beetle gaining access to the hive via the drainage holes. Masking tape seems hopeless at keeping out the water so we are going to move to gaffer tape. We're also experimenting with a different OATH design



As you can see from the image on the left, the new OATH is almost double the thickness of the box we are currently using, however unlike the Zabel box, ours has the same OATH internal dimensions.

The timber is Canadian softwood and will probably require painting, however we believe that it will provide the insulation required to move away from the foam

## Epilogue

### Stats for 2015

<b>Scheduled checks</b>	<b>421</b>
<b>Actual hives checked</b>	<b>392</b>
<b>Hives not ready</b>	<b>94</b>
<b>Hives split</b>	<b>271</b>
<b>Hives dead</b>	<b>31 (this includes 2015 splits)</b>

In September 2014 Ku-ring-gai had 421 hives placed on residential properties, available for splitting. One year later that number has grown to 520 hives — another successful splitting season.

A small selection of mostly 2015 images



This is my desktop image



Two girls and a ute, splitting team extraordinaire



No Small Hive Beetle getting in these two hives





A splitting workshop at the Nursery, chaotic but fun



This behaviour happens a lot, worries bee owners, but isn't a problem, the bees are just taking a stroll



Some imaginative bee houses