Beeswax for Show

by Redmond Williams

The class for a cake of beeswax for show is probably one of the most difficult in the show schedule - requiring a lot more patience than skill. The first thing you must do is to study the show schedule and produce only what is required. Most shows have a weight and thickness requirement for the cake of wax. The preparation is so difficult that there is no point in being disqualified over a simple thing.

Exhibiting beeswax, like all other classes, must be prepared for before and during the active season. Why do I say that you should only take your cappings from newly drawn combs in new supers? You should not use old supers as the bees incorporate some of the underlying comb into the cappings. You may also cut too deep into the comb during extraction and again contaminate your wax with old brown comb.

It is often noticed at honey shows that newcomers to the craft of beekeeping nearly always have lovely clean honey for the show bench. The same applies to their wax. This is due mostly to the fact that any of their combs have not yet been contaminated with propolis or age (dark comb).

You should take your wax from a super or a hive that does not have a lot of propolis as this tends to darken the colour of your wax and take considerably from the aroma of the cake. The nectar source also plays an important part in the quality of the wax.

The best cappings for your cake would come from either ling heather or white clover honey. Both of these sources give a lovely white capping which in turn gives a light primrose coloured wax with a most pleasant beeswax aroma. This is something that always attracts the judge's attention and can weigh heavily in your favour in the final analysis. Sources like dandelion on the other hand give you a very deep coloured wax, which is not as suitable for the show bench.

During the extraction process you should select out all the most attractive frames and keep them to one side. When you have all the frames together clean out your uncapping tray and uncap them separately.

Leave the cappings to drain overnight. I do not press the cappings for show wax, as it will make it almost impossible to wash out all the honey from them before melting.

The cappings should be washed out in rainwater in the following days and not left any longer as the honey could start to ferment and taint the aroma of the wax. This first washing would be very suitable for mead, as it will have a high honey content.

Wash the capping out three times leaving to soak overnight at each washing. Just a reminder that all water used or that comes in contact with the capping/wax in the preparation process must be soft clean rainwater.

After washing, the cappings should be spread out on a few sheets of paper to dry. When dry you should remove any piece that is discoloured and any other foreign bodies. Take great care with this, as it will determine the quality of the finished wax.
When you are satisfied that the cappings are clean melt them down into a block. This can be done in a solar wax extractor or by heating in a water bath using a clean Pyrex jug as a container for the wax. If you are using a solar extractor make sure that it is very clean.

Place your cappings in a pair of micromesh tights and secure it in the extractor. Put in a clean plastic container to catch the melted wax. You should put one inch of water in the base of this container. This will help to separate the debris from the wax as most of it will sink. Once all has melted remove it immediately from the extractor, as prolonged heat will damage it.

If you use a water bath i.e. a solid base saucepan into which you put your Pyrex jug, fill with water to about half way up the jug. Pyrex is much more suitable for show wax as it will not react with the wax as may happen if you use a metal or aluminium container.

To melt the wax keep adding the cappings a small amount at a time until the container is full. It should then be filtered through surgical lint fluffy side up.

Whichever method you use always aim to have twice the amount of wax that you require for the cake as it seldom goes right on the first attempt. To make the cake you will require surgical lint, filter paper, two Pyrex jugs, a mould, a pane of glass one inch bigger than the mould (6mm thick), a rectangular basin, a wire tray, two thermometers and a 150mm plastic sieve.

The mould is the most important part of your equipment. It should have sloping sides and preferably be round, as this will aid even cooling of the cake and help to avoid blemishes or cracking. The inner surface of the Pyrex mould should be examined meticulously for any blemish on the surface, as this will reproduce itself on the surface of the finished cake.

It is also better if the wax comes close to the surface of the mould when poured as the heat from the glass cover will be of more benefit to the finished surface. So choose your mould carefully.

Before starting to make the cake note the following points. It is best to work at wax at night when the house is quiet. The clothes you wear are also very important. Never wear wool or hairy fabrics. It is best to wear polyester or nylon clothing. The ideal is a white coat. How often has a red, blue or green rib destroyed a lovely cake of wax?

So to make the cake melt the wax in the Pyrex jug by standing it in a water bath and filter it through the the plastic sieve lined with surgical lint into another clean Pyrex jug. Again the water should always be rainwater and not allowed to boil strongly as splashes can enter the wax. A wire rack under the jug prevents the base from becoming too hot and allows for better circulation around the jug. Never cover the saucepan with the lid.

While still warm return the wax to the heat and melt again. This time filter through filter paper into the cleaned jug. Before you do this be sure to wash the sieve with boiling water to remove any hairs from it. Always discard the end of your wax, because this will contain most of the debris. Cover the jug with plastic or cling film.

To pour the cake put the jug of wax in the water bath to heat. While the wax is melting prepare the mould. This is done by firstly determining the quantity of wax required. Weigh the mould. Then add the equivalent weight of water.

Mark the watermark on the outside with a permanent marker. Never inside as there is a fear of contamination. Place the mould in the basin again on a wire rack and mark a water line 3mm underneath the wax level. Wash the mould in very hot water with some wash up liquid. Rinse and allow to drip dry. When almost dry add a few drops of concentrated wash up liquid and glycerine to the mould and rub it in well until it feels dry to the touch. Wash the 6mm pane of glass and allow it to drip dry. Place the upturned mould on the glass and put it in the oven at approximately 80°C.
When the wax has melted allow it to cool. Place a thermometer in the jug and monitor it until the wax reaches 70°C. Give the wax an occasional stir with the thermometer to ensure the temperature is uniform. Again be careful not to introduce any foreign bodies.

When the wax is nearing 70°C fill the basin with water at 66°C. Adjust if required. Take the mould from the oven and float it on the water. Pour the wax into the mould gently to avoid splashing or waves up the side of the mould. Cover with the plate glass and leave to cool preferably overnight. In the morning if your cake has not cracked or rippled immerse it in the water and it should float out. If it is stuck place the mould in the fridge for a while.

The finished cake should be handled with great care. You should dry it with a towel but do not rub the moulded side. This prevents pieces breaking off when the judge is testing it for plasticity.

When you succeed in producing a nice piece of beeswax from your mould it is one of the most satisfying experiences you are likely to have in your beekeeping career. Lift it up, smell the aroma and feel proud.

When transporting the cake to the show or when it is on the show bench it is recommended to have a case to protect it. A nice piece of velvet cloth underneath it will add to its overall appearance.

In conclusion although this article is mainly directed at wax for showing, the same method of preparation applies when preparing wax to exchange for foundation or for making polishes. It is a very valuable substance and every bit of it should be salvaged.