



## **Product on and Exhibition of Comb Honey (No 5)**

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### **A NATIONAL HONEY SHOW PUBLICATION**

#### ***INTRODUCTORY NOTE***

Apart from wishing to provide interest and pleasure for Beekeepers, the National Honey Show has the serious aim of raising the standards of production of honey and all other bee-produce.

With this objective in view, leading authorities have been invited to write for our Schedules on a number of subjects and their work is here available for more general distribution. We wish to thank all our contributors, they are leading exponents of their skills, we have, however, to make it clear that the advice which they give is their own individual method, we feel sure that they would be the first to encourage new alternative ways of preparation with a view to continual advancement and progress within the Craft.

Hon. General Secretary

### **NATIONAL HONEY SHOW**

#### **PUBLISHER'S NOTE**

*This special article in the National Honey Show series on the technique of producing and preparing the main type of Honey and other Bee Products is yet another contributed by an expert dealing with his own particular line, which to this case is comb honey.*

*Mr. W. S. Robson, B.Sc, has been in Beekeeping for 40 years, 20 of them as Beekeeping Advisor at the Edinburgh College of Agriculture. He holds the Scottish Beekeepers' Association Expert Beemaster and Honey judge Certificates and is well known as a successful exhibitor at the National.*

*With his son he is now running a Honey Farm of 400 colonies in the Scottish Border Country near Berwick-on-Tweed, producing flower and Heather Honey, about 50 per cent of which is marketed in the Comb.*

*In this article he describes concisely and clearly the basic points of the methods they use.*

#### ***PRODUCTION AND EXHIBITION OF COMB HONEY***

By W. S. Robson, B.Sc.

**Introduction.** Honey in the comb is without doubt the most attractive form of honey, and properly produced and prepared for market it has outstanding sales appeal. No doubt the majority of beekeepers would like to produce good quality comb honey but it should only be attempted by those who have the means of turning out a really first class product. **Requirements for Comb Honey Production**

### **1. Bees**

Only bees of a good comb building strain, which seal their combs attractively should be used. This is necessary because combs must be built from foundation each year. One can usually identify a good sealing strain by examining the sealed honey in the brood chamber. Bees which seal with a greasy capping (Caucasian?) or use a lot of propolis or build irregular combs are unsuitable. Generally speaking, native strains of dark coloured bees are most suitable for comb honey production.

### **2. Locality**

An area where a heavy nectar flow can be expected is necessary for good results. It is impossible to produce comb honey in a locality where the nectar flows are light and intermittent.

### **3. Flora**

Good quality ling heather honey, light amber in colour and with pure white cappings is without doubt the most attractive comb honey. With this exception comb honey should be light to light medium in colour, so plants producing this type of honey should predominate e.g. white clover willow herb, wood sage, etc. It is quite futile to try to produce comb honey in an area where there is honey of a type which granulates quickly. Raspberry and rape are two such honeys. Some beekeepers have been obliged to give up production of ling honey in the comb after the bees had been to raspberry pollination because, although raspberry honey was removed there was always a carryover of this honey from the brood chambers sufficient to cause the heather honey to granulate and become unsuitable for sale.

## **Production of Comb Honey**

Comb honey is produced for Market either as sections (nominal weight 1 lb.) or as cut comb honey in pieces 6-8 ozs. or 12-16 ozs.

The stocks selected for comb honey production should receive the same treatment as those worked for extracted honey, during each

summer and be supered with crates of drawn comb if possible. When it is evident that the main nectar flow is commencing, the supers should be removed from the selected stocks, the bees brushed from the combs into their hives and these supers given to other stocks for completion. Comb honey supers should then be placed on the selected hives and added to as required. A section crate holding 21 Sections is very suitable, and allows for some packing to retain warmth. It is advisable to use a section block for folding the split and grooved sections to ensure that they are assembled accurately, and that the foundation will hang vertically when the sections are in the crate.

The foundation should be adjusted so that its lower edge is about inch above the bottom of the section, to allow for stretching. If this is not allowed the foundation may buckle and the section be spoiled.

When the first crate of sections is about I- completed, a second crate should be added. When this has been occupied by the bees, and the foundation built out, the positions of the crates should be reversed, and the crate of completed sections should be removed as soon as possible, using the clearer board. Sections must be handled with great care at all times. They should be held only by the corners and must never be twisted (e.g. to remove from crates) as this damages the comb. After removal from the crates, any propolis should be carefully scraped from the wood and the sections placed in biscuit boxes and stored at a temperature of

65-75 deg. F. until required for use or for sale. Sections for sale may be placed in section cartons, or they may be wrapped in clear cellophane. If the cellophane is slightly dampened before wrapping it will dry quite tight and enhance the appearance of the sections. Any sections which are found to be not fully sealed may be placed in the centre rows of subsequent crates for finishing while the flow continues.

Some people advocate the use of hanging frames in which sections are suspended among shallow frames. I cannot recommend these for section production. I know several beekeepers who purchased the carriers but none use them now.

For the production of comb honey in shallows for cutting, the close ended frame with 11 inch spacing is very useful, giving a comb of about the same thickness as a section. These frames may be fitted with full sheets of unwired foundation (20 Sheets per pound) or simply with starters about 1/2 inch in depth.

Management may be the same as when working for sections, the comb honey supers being substituted for the extracting supers when the main nectar flow commences. When the combs have been sealed the crates should be removed from the hives, the combs cut up and the pieces placed in boxes. The actual cutting of the combs should only be carried out immediately prior to it being put on sale.

A hardwood template of the size required to fill the comb boxes should be cut, and a small screw fixed to its centre for handling. A large drip tray should be obtained and a wire grid placed over it (3 or 4 Waldson excluders do very well.)

The comb should be laid on its side on the wire and a sharp thin bladed knife used to cut around the inside of the frame which is then removed. Using the template and the point of the knife, the surface of the comb is then marked off into as many pieces as can be obtained from the comb (6 or 7 1lb. size). The comb is then completely divided up with the knife, and the loose honey allowed to drain into the drip pan. If the comb is warm this will only take a few minutes. The pieces may then be lifted with a pie slice or similar tool, placed in the Comb Boxes and the lids fixed in position. The recently introduced 1/2 lb. plastic boxes with transparent lids are very convenient and display the honey to good advantage.

For those who intend to produce and market cut comb honey on a large scale, it may be worthwhile to purchase one or other of the special comb cutting appliances on the market, but for show work there is nothing to equal the method described above.

### **Comb honey for Exhibition Sections**

Sections should be clean, well filled and free from propolis staining and other blemishes. Some judges prefer heavy sections with all cells filled and sealed whilst others prefer those in which the attachment cells are completely empty so that, when required, the comb may be cut out cleanly from the frame without spillage of honey 100% worker comb is desirable in sections.

As with other exhibits, the exhibitor should read carefully the conditions and rules of the show. It will be found that in most the requirement is that sections should be shown in white cases which can be opened by the Judge to enable him to remove the section. It is usually a further requirement that both sides of the case is to be glazed so that not less than 3 1/2 inch x 3 1/2 inch of the comb shall be visible on each side of the case. The white section show cases marketed for this purpose are probably the most suitable.

### **Shallow Frames**

New frames fitted with wired foundation to avoid sagging should be used. The combs should be well filled and free from blemishes as in sections. They should present a flat level surface on each side and stand out well clear of top and bottom bars to facilitate uncapping. Cell construction should be uniform throughout, i.e. 100% worker or 100% drone.

Deep or Shallow Frames should only be put on the show bench in properly constructed cases. Special attention should be given to ensure that the space between the glass on either side is sufficient to allow the

insertion of the frame without damage to the surface of the comb. Furthermore the frame when in position should be prevented from swinging otherwise it may be badly damaged during transit. The top of the case should slide back without forcing so that the comb may be viewed from above.

## **Chunk Honey**

Chunk honey is the term applied to pieces of comb honey which are placed in glass jars and the jars filled up with clear liquid honey.

Chunk honey has never become very popular in this country, but commands a higher price than extracted honey and there are chunk honey classes in many shows. It is also a useful addition in a display class.

To prepare-comb honey is produced then cut into pieces of the requisite size and thoroughly drained as already described. The extracted honey should be heated to 150 deg. F. to retard granulation and allowed to cool to 110 deg. F. before using. The pieces of comb honey should be placed in the jars and the jars filled with liquid honey, the jars being tilted slightly so that the honey runs down the inside. The lid must be screwed tightly on the jar at once and the jars laid on their sides until cool, to prevent crushing of the comb against the lid of the jar. Chunk honey should only be prepared and marketed in small quantities so that

it can be sold to the consumer before the liquid honey begins to granulate. For show work the writer prefers a medium coloured piece of comb honey in very light coloured liquid honey. Any sign of incipient granulation will render the sample unfit for the show bench.

## **Faults in Comb Honey**

### **Pollen Cells**

Pollen is sometimes carried into the supers and stored. This is most likely to happen when a prolific strain of bee is confined to 10 or 11 B.S. Combs usual for comb honey production, as there is then insufficient room in the brood chamber for pollen when the combs are

crowded with brood. The combs should be viewed against a strong light; sunlight for preference. when pollen cells can easily be noticed. Combs containing pollen cells should never be put on the market, but used in the home. Although pollen is very wholesome and nutritious, members of the consuming public are unlikely to realise what it is and will almost certainly complain about its presence in comb honey.

### **Braula,**

When Braulae are present in a Stock of Bees the super combs will almost certainly be disfigured by their larvae tunnelling in the cappings.

The cappings appear as though they had been scratched with a pin. Stocks infested with Braula should not be used for comb honey production.

### **Weeping**

Honey is hygroscopic. that is it absorbs moisture. If comb honey is not stored in a dry atmosphere, moisture will be absorbed through the cappings and increase the volume of the honey in the cells until it soaks the cappings and finally oozes in droplets from the face of the comb.

Sections may be stored very successfully in tin biscuit boxes the lids being sealed with cellotape. Stored in a warm cupboard at a temp. of 60-70 deg. F. they will remain in excellent condition for long periods.

### **Wax Moth damage**

The larvae of wax moth may cause damage by tunnelling in the attachment cells of sections leaving a tangled mass of silken threads and debris.

These larvae are only found in hives where worker bees are unable to get at them to remove them, such as under quilts, in saw cut top bars or in deep cracks or grooves in floors. so these should be avoided. on removal from the hive sections should not be left standing about. but carefully stored, as already indicated.

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The National Honey Show presents annually a three day show of the best of the products of the honeybee, with additional classes for kindred interests and skills, including school bee-keeping, a lecture programme and a display of the latest and finest bee-keeping equipment on the market today.

It attracts entries and beekeepers from all over these Isles, and a number of leading organisations hold meetings during the Show.