

## Southampton & District Beekeepers Association

[www.southamptonbeekeepers.co.uk](http://www.southamptonbeekeepers.co.uk)

### How Do I? Information Sheet #9

#### Easy-steam Wax - Extractor Introduction and Step by Step Instructions

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#### Introduction

The association has purchased both a National and a Langstroth Easy-steam Wax Extractor which is available to members to borrow. The easy-steam Wax Extractor is used to recover wax from old brood combs, to enable the bee keeper to recycle wax back into the system. To borrow the Association's Easy-steam Wax Extractor there is a deposit payable but this will be refunded if the equipment is returned 'as new' and 'as clean'.

The equipment consists of an electric steam generator attached to a steel cover via a steam hose along with a steel tray and metal grid. A wooden eke is also provided to sit between the brood box and floor during extraction. The cover resembles the metalwork of a hive roof and is chosen to fit over a National or Langstroth brood box depending on your choice of hives. The brood box is not supplied and members are encouraged to use their own as part of the extraction process. The metal tray and grid sit on a solid hive floor. It is recommended to raise the floor from the ground using bricks in order to simplify the process of collecting the wax during steaming.

After filling the steamer unit, switch on the wait patiently. After about 15 to 20 minutes wax and water will run out of the front of the hive into a suitably placed container. When the wax ceases to flow switch off the steamer and wait five minutes or so for the residual steam to disperse. Please note that plastic runners will melt if left in place. If you chose to process two brood box one after the other, be sure to monitor water levels in the steamer and take care to avoid injury, operating and refilling according to the manufacturers instructions.

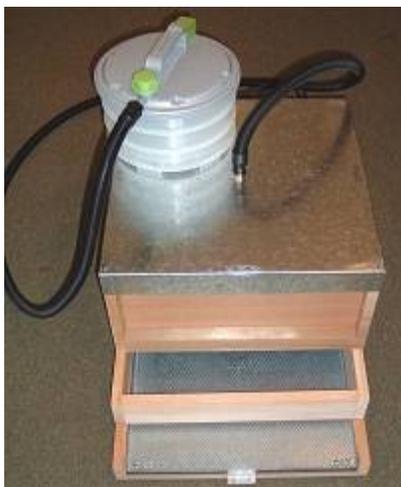
In the brood box you will find empty frames and some cocoon material that has lodged on the frame bottom bars. The majority of the cocoon will be on the mesh base and can be discarded. The frames and brood box have been sterilised by the steam at reported temperatures of approximately 105 degrees centigrade.

This wax and water solution is left to cool and the wax will float on top of the water to form a crust. This wax then needs to be processed further before exchanging for foundation or candle making. Details on Wax Purification - The Andy Method are on the Association website in the How Do I section.

In the hive you will find completely empty frames apart from some cocoon that has lodged on the frame bottom bars and of course the wire from the foundation. The majority of the cocoon will be on the mesh base and can be discarded.

The equipment should be cleaned thoroughly by scraping any residual wax and propolis from the woodwork and metalwork. A wall paper scraper is recommended. Cleaning is a little easier before the equipment cools completely.

## Step by Step Instructions



*Easy-steam by E.H. Thorne*

1. Members wishing to hire equipment should contact the Membership Secretary, Graham Watson. There is a deposit payable but this will be refunded if the Easy-steam is returned 'as new' and 'as clean'.
2. Easy-steam extractors are available for either National or Langstroth brood boxes.
3. Members need to use their own brood boxes for the extraction process. Please note that plastic runners will melt if left in place. Plastic end spacers will also need to be removed as well.
4. The frames and brood box are sterilised by the steam at reported temperatures of approximately 105 degrees centigrade.
5. Using bricks or equivalent, raise the solid wooden floor up from the ground. Place the metal tray and mesh insert in the tray on top of the floor. The whole base should have a slight tilt forward to assist the wax in draining out.
6. Place the wooden eke on the floor.
7. Place the brood box on top of the eke



8. Place the frames into the brood box. Make sure there is a gap between the frames to allow the steam to circulate.
9. Also ensure that there is a gap under the steam inlet to allow the steam to penetrate the whole box.
10. Cover the brood box with the metal roof and connect to the steamer.
11. Fill the steamer according to the manufacturer's instructions and switch on.

12. After 15 to 20 minutes the molten wax, honey residue and condensing steam will start to flow.

13. Collect this liquid in a suitable container. Please be mindful that the process will attract foraging bees. It is recommended to use the Easy-steam when the bees are not flying.

14. After the wax stops flowing, turn off the steamer and leave for five minutes for residual steam to disperse.

15. Remove the lid, taking care not to burn yourself as it will be very hot and will release a lot of steam when removed.



16. Some of the non-wax debris will have fallen to the floor and will need to be cleaned out. This is best done when it is still hot as residual wax left in it will set when it cools.

17. Clean the equipment using a wall paper scraper or suitable tool. This detritus can then be burnt or disposed of in the bin. Ensure the floor is cleaned after each use.

18. If you chose to process another box, be sure to monitor water levels in the steamer and take care to avoid injury, operating and refilling according to the manufacturers instructions.

19. Once cooled, the extracted wax will solidify on the surface of the liquid and is suitable for further processing.

20. Details on Wax Purification - The Andy Method are on the Association website in the How Do I section.

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