

STAHLMAN BEEKEEPING

NOTES FOR 2023

Issue # 36 September 9-23-2023 Recovering Beeswax
(Part 2)

Various methods about melting beeswax were shared in last weeks issue. Getting nice clean beeswax from cappings is not complicated. The beeswax in old comb requires a greater effort. Wax in old comb contains more than wax:

- Cocoons are silk linings in each brood cell. This material when heated with beeswax will absorb a great amount of melted wax.
- Beewax in comb is usually contaminated with:
 - Pollen
 - Honey
 - Propolis
 - Dust
 - Decomposition of various insects
 - Possibe chemical contamination

All these materials contibute to the discororation of beewax. They are also responsible for the water used in the heating process to be very dark.

One cardinal rule for working beeswax is not to mix dark wax with light wax. Dark colored wax will over power the lighter wax making it darker. So the first step is to separate wax sources: Light wax is processed separate from dark wax sources. Light color wax is more valuable (price wise) than dark wax. But dark wax also has value.

The process of getting wax depends upon how much material with beeswax one has to work with. Most of us do not have a lot of hives and our production of beeswax will be small. Those with larger numbers of hives will use wax presses, and wax melters designed to reduce the work load.

During the hot days of summer I let my wax melter do the work with both cappings and dark rendered comb. The sun is an efficient source for heat. Melting wax requires temperatures above 148° F. It doesn't work now that temperatures are getting colder.

IMPORTANT POINTS



Beeswax has value just like honey.

Prior to whale oil, and electricity, beeswax was used for lighting. Even today bees wax is superior to others waxes used to make candles.

From: ABC of Bee Culture
1886

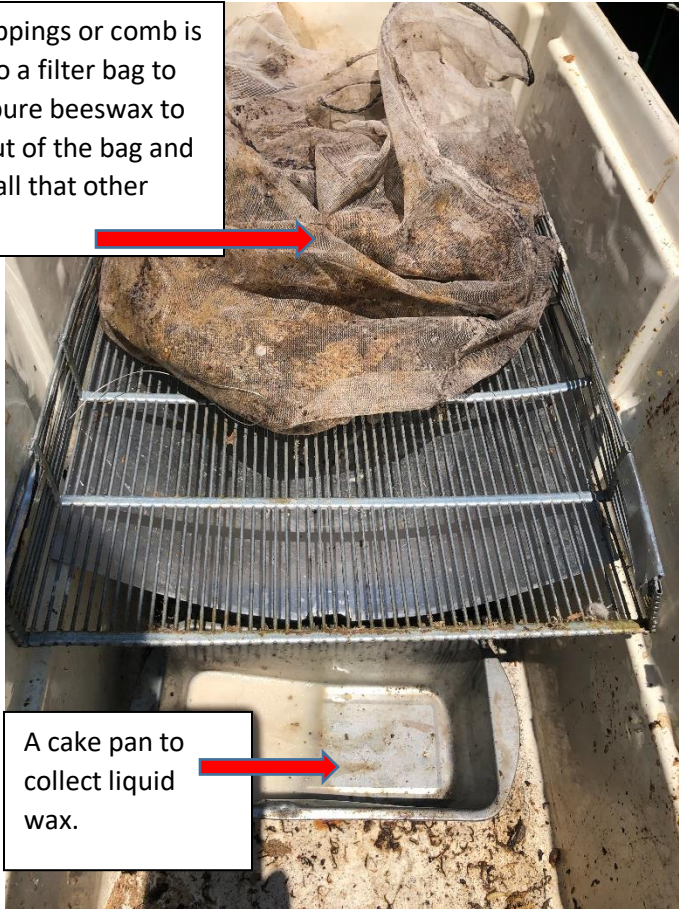
“I have spoken about order, care, and cleanliness, in handling honey, candy, etc. now, my friends, it is much more serious thing to daub melted wax about the house, on the carpets, and on your clothes, than it is to daub either honey or candy.

You can very easily spoil a dollar's worth of clothing while fussing with 10 cents worth of wax, as I know by experience.

When you commence, bear in mind and resolve that you are going to have things clean and neat at every step, no matter what the cost.”

The words of A.I. Root on working with beeswax

The cappings or comb is put into a filter bag to allow pure beeswax to flow out of the bag and retain all that other stuff.



A cake pan to collect liquid wax.

A quick look at a solar wax melter:
This is a wax melter that I fashioned out of an old discarded igloo portable ice chest.



It did a great job for me this past summer. Like all solar wax melters it operates on the greenhouse principle of collecting heat. This set up was ideal because it required very little work for me to get wax.

First, I used what I had on hand. An old queen excluder, a drain pan below the excluder to allow melted wax flow into the pan in the bottom of the wax melter. In some cases, I would put cakes of wax thru the process a second time.

The sun bleaches the wax and filtering it again removes any unwanted debris that got thru the first time.



Is it possible to tell which is capping wax and dark comb wax?

Beeswax has character:

- Smell
- Color
- Purity
- Texture

The dark wax may require additional cleaning if it is to be used or sold. It is easy to reheat beeswax and filter it again.

Working to clean dark wax is messy and time consuming without a solar wax melter. I heat all my dark wax outside. I have a shed but quite frankly, I don't like the clean up if wax drips on the floor or counter. The debris which is made up of cocoons and all that extra stuff in the filter bag still contains quite a bit of beeswax.



Often referred to as "slumgum" it is full of wax which can be recovered. Slumgum can be easily processed in a steam pressure cooker allowed to get to 350°F. I have only seen this done by commercial beekeepers. Special wax melters are sold on the commercial market as well to remove a large portion of the wax in the slumgum. I do it the old fashioned way!



This is my propane turkey cooker. It does a reasonable job getting that wax from the slumgum.

- I need the set up shown below
- I need to put the slumgum in a filter bag. Tie bag so the slumgum cannot escape, drop it in the cooker, add a screen and some rocks to prevent the bag from rising up, put in enough water to cover the rocks by several inches and turn on the heat.



The slumgum and dark comb to be processed in the bag filter.



The bag is tied off to prevent the slumgum from escaping. Otherwise the wax will be mixed with all this debris and will require being separated while still hot and difficult to manage. Much of the wax will still be trapped in slumgum and require further processing.

Since wax and slumgum will rise when water is added, the bag must be held below the top water level as the wax floats above the bag holding the slumgum.

The first two photos show the screen that holds the slumgum bag just above the heated



bottom of the container. I use two large rocks to make sure the screen stays down below the water and finally a picture of the dark wax which has risen to the top and is ready to harvest. I can either just let the cooker cool and take the dark wax out for further processing or try to pan some of that wax out into small containers to set up.

I generally let it set up and then re-melt it – using new clear water and additional filter material to lighten the darker wax.

Slumgum has some uses:

- You can raise wax moth in it. It still contains a lot of pollen and cell debris. I know of an Ohio beekeeper who sells this with active wax moth in it for \$28.00 a quart jar. The buyer can then use the wax moths and jar as a starter to raise more wax moths. Or collect the worms to go fishing.
- It does still have some wax in it and is a good fire starter. Mixed with wood chips it makes an excellent fire starter.
- It (I am told) is a good addition to garden soil. I have always thought it too valuable to use that way.



If you have ways to use it that I did not list, I would appreciate knowing what you do with it rather than throwing it in a fire pit.

Fall is a great time to consider starting the process of learning about how to keep bees. This link will take you to a local class being offered in Raleigh. If you know someone looking to take a class. https://baileybeesupply.com/educational_resources/beginner-beekeeping-class/ It is being taught by Certified and Master North Carolina Beekeepers.