

BEGINNING BEEKEEPING

CLASS 9: PRODUCTS FROM THE HIVE

HONEY

- ✦ Getting the frames out of the hive
- ✦ Cut comb and chunk honey
- ✦ Creamed honey
- ✦ Extracting 3 ways
 - ✦ Crush and strain
 - ✦ Uncap and drip
 - ✦ Extractor
- ✦ Raw vs. pasteurized
- ✦ Labeling

REMOVING FRAMES OF HONEY FROM THE HIVE

- ✦ Rule 1: Make sure you are leaving honey for the bees
- ✦ There are a couple of different methods for removing frames from a hive:
 - ✦ Fume board
 - ✦ Shake and sweep
 - ✦ Bee escape
 - ✦ Bee Blower

METHODS FOR REMOVING FRAMES: FUME BOARD

- ✦ Fume board: it often looks like a hive lid with one side with a metal or black cover and the inside with an absorbent material like felt.
- ✦ You spray a bee repellent on the material side — something like Bee Go or Bee Quick
- ✦ Put the fume board on the super (no inner cover or outer cover)
- ✦ The heat from the sun will warm the repellent and make it aromatic enough that the bees will move down, pretty much clearing the super of bees.

METHODS FOR REMOVING FRAMES: SHAKE & SWEEP

- ✘ Requires more time than some of the other methods.
- ✘ Each frame is removed one at a time and the bees are first shaken off the frame and then swept off the frame with a bee brush or equivalent
- ✘ Cleared frames are placed into an empty super a little ways from the hive and is kept covered to prevent other bees from getting in.

METHODS FOR REMOVING FRAMES: BEE ESCAPE

- ✘ There are different kinds of bee escapes available. Some fit into inner cover and some come as complete board.



METHODS FOR REMOVING FRAMES: BEE ESCAPE

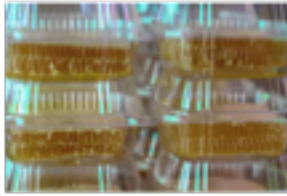
- ✘ Put the board with the bee escape below the supers that you want to pull to harvest the honey.
- ✘ Bees can get out but not get back in. Bee escapes are 1 way devices.
- ✘ After 24 hours, come back and the bees should mostly be gone from the supers.

METHODS FOR REMOVING FRAMES: BEE BLOWER

- ✘ Pull the super off the hive and set it on it's end
- ✘ By directing air from the blower between the frames, the bees are blown out of the super.

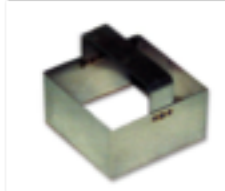
CUT COMB OR CHUNK HONEY

- ✦ Up until the 19th century all honey was comb honey (1869)
- ✦ Some people still prefer to get honey with the comb because then they know it's really honey and not some "fake" equivalent
- ✦ Cut comb honey is one piece of uncapped honey still in the comb — often sold in plastic clamshells.



CUT COMB HONEY

- ✦ Generally if you are going to sell cut comb honey you either start with cut comb foundation that doesn't have wires or plastic or let the bees build the wax themselves.
- ✦ You can cut it with a knife or using a cut comb cutter that you can buy.



CHUNK HONEY

- ✦ Chunk honey is a combination of liquid honey and a chunk of comb.
- ✦ You can use honey that is wire and plastic free, or use honey on a frame that has crimped wire foundation.
- ✦ The comb can be capped or uncapped.
- ✦ Cut the comb away from the frame or wires using a sharp kitchen knife
- ✦ The chunk should easily fit into the jars you are using. Put the chunk in the jar.
- ✦ Fill the rest of the space in the jar with liquid honey you extracted.



CRYSTALIZED HONEY

- ✦ All honey will crystallize eventually
- ✦ Honey from tree nectar crystallizes slower than honey from ground plant nectar
- ✦ Return to liquid state by warming it up
- ✦ Don't boil it!
- ✦ Or use it to make creamed honey!

CREAMED HONEY



CREAMED HONEY

- ✦ Also known as whipped honey, spun honey, churned honey
- ✦ Finely crystallized honey
- ✦ Seeding liquid honey with existing creamed honey will speed up the process and provide finely crystallized honey
- ✦ Or use honey you have that is already crystallized and whip it with a standing mixer to break up the size of the crystals.
- ✦ Spreads like butter on bread at room temperature
- ✦ Step by step directions are available on the internet "How to make Creamed Honey"

GETTING READY TO EXTRACT OR CUT

- ✦ Only extract honey where about 90% of the frame has been capped. Capped honey has about 18.6% water content or lower. Higher water content can result in fermented honey (not necessarily a bad thing).
- ✦ You can use a refractometer to test the honey for the correct moisture level before packaging the product

CRUSH AND STRAIN METHOD OF EXTRACTING

- ✦ Cut the comb from the frames and put in strainer over collecting bowl.
- ✦ Smash with spoon or potato masher or other good smashing device
- ✦ Let the honey run out of the combs into the bowl.
- ✦ Note: If you smash too much, you'll end up with little particles of wax in the honey. They float to the top and can be scraped off before bottling.

CRUSH AND STRAIN METHOD OF EXTRACTING



UNCAPPING HONEY

- ✦ If you are going to use the uncap and drip or an extractor to remove your honey, you will need to uncap the honey first.
- ✦ You can use a hot knife, uncapper scraper, or other kinds of knives to uncap.
- ✦ You want to just take the top layer of wax off the honey.

UNCAPPING HONEY



UNCAPPING HONEY



UNCAPPING HONEY

- ✦ Keep the wax from the uncapping
- ✦ There may be a lot of honey in it, so consider straining it before processing the wax

UNCAP AND DRIP



EXTRACTING HONEY WITH AN EXTRACTOR

- ✦ You will need a bucket for the extracted honey to flow into
- ✦ You may want to add a filter between the extractor and bucket
- ✦ A bucket with a honey gate is helpful.

FILTERS AND HONEY GATE



EXTRACTING HONEY

- ✦ Honey extractors can range from about \$150 for a 2 frame, manual extractor up to multiple hundred dollar versions.
- ✦ Join a bee club that has an extractor for members to use
- ✦ You want to balance the extractor as you add frames
- ✦ Start slow and speed up
- ✦ Give honey time to settle before bottling to let small wax debris and bubbles rise to the surface

EXTRACTING HONEY



RAW VS PASTEURIZED HONEY

- ✦ Unfiltered honey can have wax, bee parts, and large globs of pollen in. You can filter these out and still be considered raw honey.
- ✦ Raw will still have fine particulates that are not filtered out.
- ✦ Raw may appear cloudy or opaque, but not necessarily.
- ✦ Pasteurized honey is heated and ultra filtered to improve clarity and shelf life.

LABELING HONEY

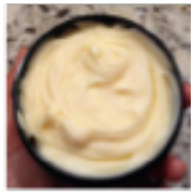
- ✦ Federal & NC State requirements
- ✦ The name **honey**. The floral source (sourwood, clover, etc.) can be part of the name if the product contains a significant amount of pollen from that flower. Wildflower Honey is fairly common labeling.
- ✦ Name, address, and zip code of the manufacturer, packer, or distributor
- ✦ Net contents in the lower 30% of the label expressed in both pounds/ounces and grams.

LABELING HONEY



* <https://www.ncbeekeepers.org/resources/labeling>

PRODUCTS WITH HONEY



Eczema Cream



Infused Honey (Cinnamon)

WAX PROCESSING

- * Save your wax cappings and old brood frame wax for processing.
- * Some things you can do with the wax:
 - * Use for frames — either coating plastic foundation or holding cut comb foundation in place
 - * Use for candles or other molded wax
 - * Use in beauty products
 - * Use for bee wrap coverings
 - * Other uses — seamstress, fire starters, furniture polish

WARNINGS!

- * Remember that wax is flammable.
- * You want to have equipment specific for this task. Don't use your good cooking equipment!
- * Never put wax coated items in the dishwasher.

SOME METHODS OF CLEANING WAX

- ✦ Melt wax in double boiler type setup. Then strain through filter material. Good for small jobs.



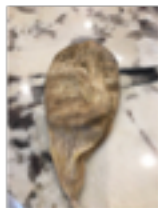
SOME METHODS OF CLEANING WAX

- ✦ Solar melting box- uses the sun to melt the wax. Can make or buy. Lots of plans on internet.



SOME METHODS OF CLEANING WAX

- ✦ Boiling water method - put wax in leg of pantyhose or nylon knee high hose. Hang in pot covered with water. Wax will melt and debris will stay in hose. Remove hose. Let water cool and remove cleaned wax disc.



CLEANED WAX

- ✦ Cleaned wax has a pleasing aroma and a nice lemon-yellow color
- ✦ Can be sold for \$10/ pound
- ✦ Make sure the discs are not too thick



SOME USES OF CLEANED WAX

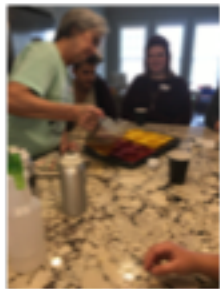
✦ Candles and Christmas ornaments



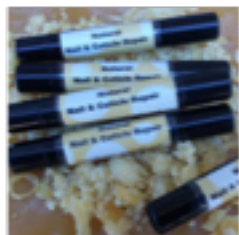
SOME USES OF CLEANED WAX - BODY BUTTER



SOME USES OF CLEANED WAX: BODY BUTTER



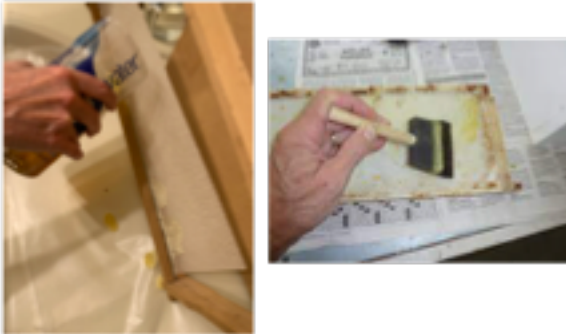
OTHER USES OF CLEANED WAX



USING WAX FOR FRAMES

- ✦ You can use wax to coat plastic frames to make it more appealing to the bees.
- ✦ You can use wax to anchor cut comb foundation in a frame or to adhere a wax strip to a frame.

USING WAX FOR FRAMES



USES OF PROPOLIS

- ✦ Healing properties for humans and bees. Propolis is thought to have antibacterial, antiviral, antifungal, and anti-inflammatory properties.
 - ✦ Cold sores
 - ✦ Sore throat
 - ✦ Skin problems & wounds

PROPOLIS

- ✦ Ways to collect
 - ✦ Scrape from hive and process
 - ✦ Process in water in oven (at lowest temp for 3 or 4 hours, stirring periodically). Debris floats to top and propolis settles in the bottom. You will need to chisel out of pot.
 - ✦ Use propolis trap. Freeze whole trap in bag and then twist to remove - way easier and cleaner.

PROPOLIS TRAP

- ✦ It looks a lot like a queen excluder. Flexible plastic.
- ✦ Put on top of frames.
- ✦ No inner cover.
- ✦ Prop outer cover up so light is getting in.
- ✦ Bees will propolis it to keep the light out.



USING PROPOLIS



Scraped & Cleaned Clean & Ground From Propolis Trap

GRINDING PROPOLIS

- ✦ You can use a coffee grinder or mortar and pestle
- ✦ Freeze first and work fast



USES OF PROPOLIS

- ✦ You can take a chunk of cleaned propolis and chew it or suck on for sore throat
- ✦ Or make a tincture that you can spray into your mouth or use an eye dropper to administer

PROPOLIS TINCTURE



USE CLEAN, GROUND PROPOLIS IN SOAP OR LIP BALM



USES OF POLLEN

- ✦ Collect when pollen is plentiful and then feed it back to your bees.
- ✦ Nutritional benefits: Pollen has many minerals, vitamins, and healthy acids.
- ✦ Note: You must process collected pollen daily or it will grow mold. Freezing works well.

POLLEN TRAPS



USES OF ROYAL JELLY

- ✦ Contains many nutrients that may be helpful to humans
- ✦ May provide Antioxidant and Anti-Inflammatory effects
- ✦ May aid wound healing and skin repair
- ✦ May provide anti-aging effects (cosmetics)
- ✦ Some queen breeders save it to use in priming cells for grafting

COLLECTING ROYAL JELLY

- ✦ Royal jelly is collected from each individual queen cell when the larvae are still young
- ✦ Remove larvae
- ✦ Scoop royal jelly out



APITHERAPY USING BEE VENOM

- ✦ No longer used just in alternative medicine.
- ✦ Being used to treat:
 - ✦ Multiple sclerosis (MS)
 - ✦ Rheumatoid arthritis
 - ✦ Nerve pain (neuralgia)
 - ✦ Tendonitis
 - ✦ Reducing the reaction to bee stings in people who are allergic
- ✦ Can collect venom with a device or just use live bees

APITHERAPY

- ✦ Larry's story



THANK YOU!

✦ That's all for this class. But please stay in touch!
