



The Managed Mentoring Program on getting started in beekeeping.

Managed Mentoring



Managed Mentoring

Other Beekeeping Equipment

Lesson | Other Equipment



What is Covered in this Module

Equipment for managing the pests of honeybees

Additional Management Equipment for the Operation

Honey Harvesting Equipment

Additional Kit Considerations



Add-On Equipment

Additional Equipment Required for the Journey



Lesson Progression

- **Follow up after lessons 1, 4, and 5**
 - Lesson 1: Langstroth Equipment
 - Lesson 4: Other Beekeeping Equipment
 - Lesson 5: Protective Equipment

- **In this lesson**
 - We will cover off a few items that you need to buy:
 - *Now, Soon, Someday, Maybe, and if you are so inclined*
 - *These include, but are not limited to:*
 - Additional beekeeping hive equipment
 - The basics of harvesting honey, and products of the hive
 - Equipment for Management



Beyond Common Equipment

■ Tools and Equipment

- The collection of tools and equipment for keeping bees starts with the basics and expands from there.
 - *Hive Tool, Smoker, Bee Suit, Hive Equipment, etc.*
- In time, as you proceed on the journey, the need arises for additional equipment in the aid of execution
 - *Equipment and tools for honey harvesting*
 - *Equipment and tools for management practices*
 - *Considerations for overwintering, and equipment storage*
 - *Aids for creating products of the hive, bottling and storing, honey, honey labels, etc.*



7 Varroa Monitoring Kit



Mite Monitoring Kit

- *A tub for collecting bees for sampling*
- *A measuring cup (1/2 Cup Size)*
- *Varroa Easy Check Device*
- *Rubbing Alcohol or some other suitable liquid*
 - Blue Windshield washer fluid is another alternative...



Varroa Mite Treatments



□ Treatment Options are Personal Preference

● They are also highly dependent upon factors and conditions

▪ We will cover details about treatments in an upcoming lesson. Make a purchase by June.

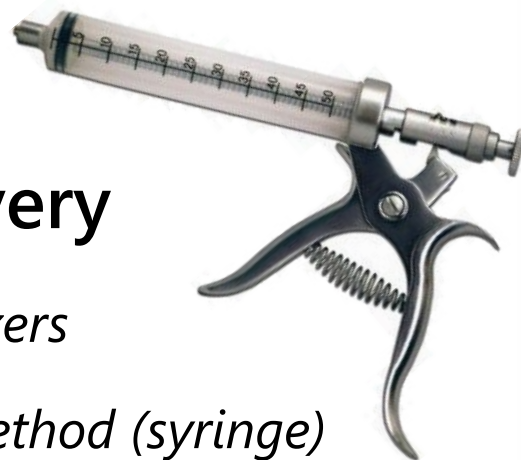


Oxalic Acid Wand or Vaporizer

□ Oxalic Acid Delivery

- *Wands and/or Vaporizers*
- *Oxalic Acid Dribble Method (syringe)*
- *ApiBioxal Oxalic Acid*
 - The only product approved for use with beekeeping operations

Requires the requisite protective envelope for protecting the person administering



Hive Beetle Traps

□ Hive Beetle Traps come in many form factors

- *These work by filling with oil*
 - The hive beetles try to escape into the device from the bees and get stuck in the oil
- *We will cover hive beetles in an upcoming lesson*
 - Depending on where you are they may be a problem or they may not. If they are you must take action



Paint Markers / Queen Clip & Marking

□ Queen Clip

- *Queen catchers come in a number of variations*

□ Paint

- *Paint Markers are common*
 - Other use simple model paint or other alternatives

□ Queen Marking Tube



Hive Lashing Straps

□ Every hive should be strapped down

- *We recommend these types of straps*

- They are **simple to open**
- They hold very well and last for seasons
- They provide reasonable utility for lashing hives for transportation

- *Bear Territory*

- If you are in bear territory, you might be better suited with ratchet straps



Ratcheting Tie Down Straps

□ Heavy Duty Ratchet Straps

- *Difficult to open sometimes*
 - Not a fan of these, but many beekeepers use them.
 - They are cumbersome to use
 - They provide superior utility and protection for transportation and bear defense
 - We have seen instances where they have proven strong enough to hold hives together well enough to keep bears out of beehives.



Hive Metal Benches



GORILLA LADDERS.com

□ Metal Hive Benches

- *These provide quite a bit of utility for setting hive boxes on during inspections*
 - They hold up well in the weather
 - They can support the weight
 - In a pinch they can be deployed as hive stands
 - There are many uses for these in a bee operation



Queen Excluder

- Used to sequester queens to a specific space
 - *The primary use of this device is to keep the queen out of the honey supers.*
 - It is placed above the brood boxes, and under honey supers. It prevents the queen from placing brood in honey boxes.
 - *Beekeeping techniques use this for many utility purposes*
 - One example: If you have a very crowded boxes and want to restrict the queen to one so she is easier to find, you can place a queen excluder between the two. Whichever has eggs in a few days has the queen...



Simple Shim (sometimes called an Imirie Shim)

□ Multiple Uses

- *One of the more common uses of a shim is to provide space for treatments over the top bars of honeycomb frames*
- *Another use is to provide temporary entrances in a stack of hive boxes for the bees to enter partway up the stack*



Bee Brush

□ Bee Brush

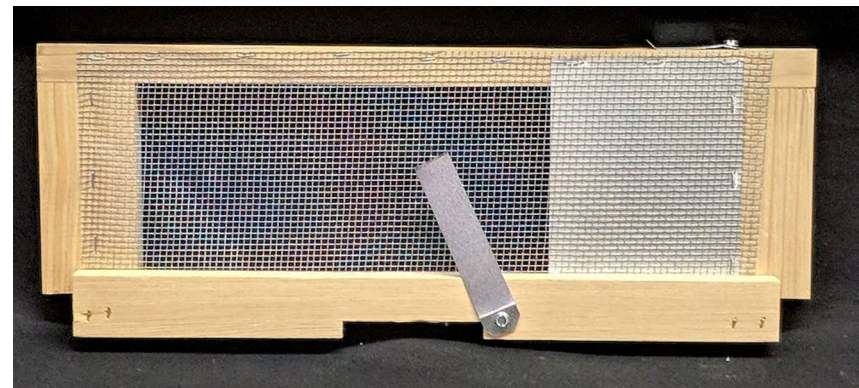
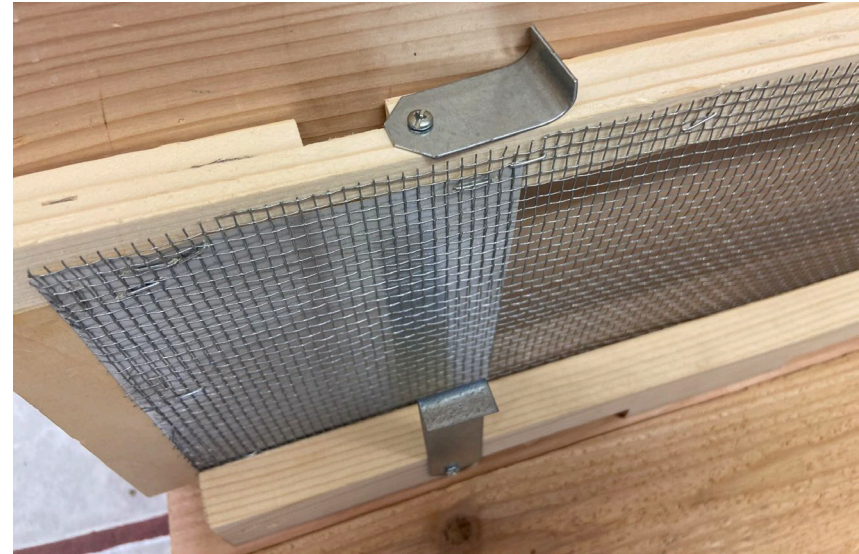
- *Commonly used tool to 'flick' bees off a frame*
 - Sold in bee supply catalogs, they come in many shapes and sizes.
 - Some premium one indicate they have softer bristles and such.
 - Buy what suits you. In our experience, even the moderate cost ones are usually suitable for the job.
 - *Tip!* Flick, don't brush or sweep.
 - Flick the bees off when using this, do not sweep across the frame like you are wiping crumbs off a table. That motion 'smooshes' bees. Flick at them and they will jump off.



Robber Prevention/Mitigation Screens

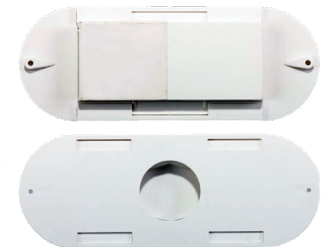
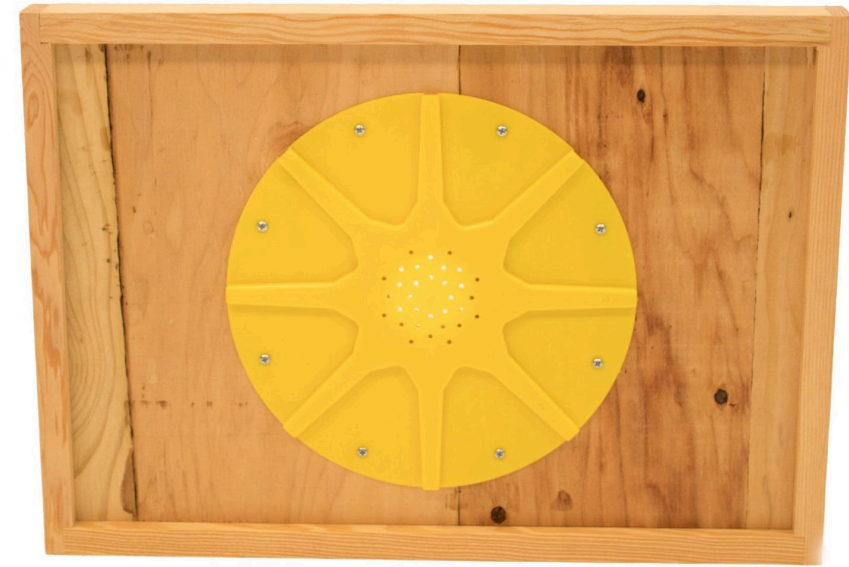
□ Many forms

- *From simple to complex; wood or plastic with screening*
 - These employ some tactic to constrain or close off the entrance to thwart robbing
 - Some leave them on on all the time; others install them one the fly; other put them on hives when robbing is most prevalent.



Honey Harvesting: Escape Boards and Ports

- ❑ 8-Way Escape Board
 - *Same principle, different design*
- ❑ Triangle Escape Board
 - *One way exit based on bee biology*
- ❑ Porter Style Escape
 - *Porter Bee Escape through the inner cover hole*



Honey Harvesting:

➤ Fume Board +

❑ Fume Board for bee removal

- *Load the fabric with a repellent chemical*
- *The heat from the plastic cap warms the liquid and creates a vapor*
 - The scent of the vaporized liquid repels the bees that are below

❑ Repellent Liquid

- *Various products are in the marketplace*



▶ Honey Harvesting: Uncapping Tools

□ Tools to remove cappings

- *Two most popular are the uncapping fork and a simple bread knife*
 - There are more than a half dozen 'devices' out in the marketplace
 - Tip: See our video about the various tools and experiment with what works for you
 - Polling beekeepers over the years, these two win...
- *Other forms abound, included heated knives, rollers, and other form factors. Feel free to experiment with what suits you.*



▶ Honey Harvesting: Buckets and Filters

□ Harvesting Buckets

- *Plain food grade buckets with lids*
- *Buckets with valves (gates)*

□ Filters

- *Stainless steel filters with varying grades of filtration screens*

Or other alternative setups



Honey Harvesting: Extractor

□ Manual or Motorized Extractor

- *2-Frame, 9-Frame, 20-Frame or more*
 - Something that bee clubs often have to loan
- *Considerable investment*
 - Often it is a good strategy to borrow one to learn
 - Determine your requirements through direct interaction and then make your sizeable investment after developing your preferences.
 - Or simply stay with borrowing the clubs extractor year on year



Honey Harvesting: Uncapping Tub

□ Uncapping Tub

- *These utility pieces are designed to aid in uncapping frames*
 - The wood bar is designed to rest a frame on while uncapping
 - The tank collects the wax cappings
 - Excess honey can be strained off from the built in gates
- *They are pricy, but quite helpful*



Refractometer

□ Measuring Moisture

- *Harvested honey should be at a specific moisture point*
 - Too much moisture and a honey will ferment in time.
- *Refractometers measure moisture*
 - They are simple to use and relatively inexpensive.
 - They are a failsafe, and many beekeepers have never used one.



Honey Jars, Lids, & Labels

□ Jars and Lids

- *Many beekeepers hoard glass jars of all kinds to store honey in.*
 - Purists will buy dedicated jars made in traditional shapes

□ Labels

- *It is a fun endeavor to source and design a local label*



Swarm Commander / Lures

□ Swarm Lure

- *Used to lure scout bees to a swarm trap*
- *Can also be used as an attractant for other management practices*
- *Very effective*
- *Available in different forms:*
 - Spray, Capsule, and Gel
 - Swarm Commander is a popular brand



Waxmoth Preventative

❑ Waxmoth Deterrent

- *Para Moth is an industry product*
 - Use this to prevent waxmoth from consuming/destroying honeycomb in storage
- *Waxmoth will come in to comb in storage and chew through it, leaving webbing and rendering each of the frames completely useless*
 - It makes a major mess and sometimes the waxmoth damage woodenware so it has to be addressed



XenTari Waxmoth Deterrent

□ Bacillus Therengensis (BT)

- *Mixed into a spray, and sprayed upon honeycomb in storage*
 - Does not impact the bees or the wax
 - If waxmoth larva develop, and begin to consume the comb, they eat the active ingredient, and it harms them to the point of death.



Closing Comments

- **Customary Close**
 - Where we stand, where we are going...
 - *This lesson adds on to the considerations for equipment and resources to keep on hand for beekeeping.*
 - *Our next topic covers some near-term topics including*
 - Record Keeping
 - Growing your Colony from One Box to Two
 - Diving into understanding Varroa Mites and Small Hive beetles
 - Monitoring and Treating for Pests of the hive



Q&A

- **What Questions did we not anticipate?**
 - If you have feedback, you can leave a constructive comment; but be nice.
 - You could also send an email to comments@managedmentoring.com
 - *Please refer to this video in the subject so we know what the reference is.*



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