

**Complete Beekeeping Short Course**

**Part 7:**

**First Year Bee Colony Management**



**examining your hive**

- get organized
- light your smoker
  - learn to do it right
  - don't over-use it
- suit up



**examining your hive**



**examining your hive**

- stand out of the flight path
- stand with the sunlight over your shoulder
- hold brood frames over the hive to examine
- keep frames in a vertical orientation
- stagger boxes that have been removed



**examining your hive**



remove the 2nd frame from the outside first

**examining your hive**

- so what are we looking for?



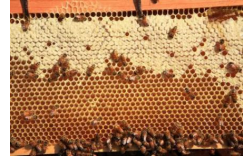
**examining your hive**

- is the queen present?
  - does she look healthy?
- does the brood look healthy?
  - how is the brood pattern?
  - eggs?
  - young brood?
  - older brood?
  - capped brood?
  - how much drone brood?
  - are there queen cells?
- do the queen have sufficient room to lay?
- do the workers look healthy?



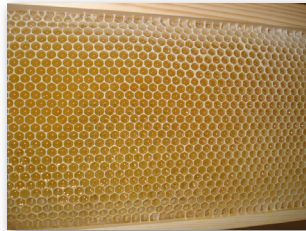
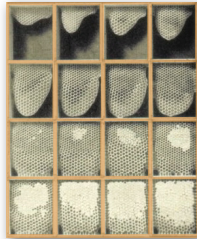
**examining your hive**

- assess the food supplies
  - pollen
    - bees returning with pollen?
    - stored around the brood area?
  - honey
    - capped?
    - uncapped?
    - empty space?
  - if  $\frac{3}{4}$  of frames are full, add another super
    - then another
      - and another
      - and another
      - as needed...



**the honey flow**

- usually mid-April to mid-June



**the honey flow**

- “ripe” honey has less than 18.6% moisture
  - the bees draw air through the hive to dry it out
  - they seal each ripe cell with a wax capping
  - bottling unripe honey can cause fermentation



perfect frame of ripe honey

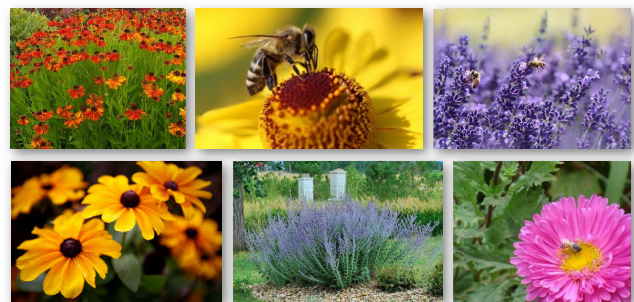
half-ripened frame of honey



**summer dearth**



**fall with the bees**



**fall with the bees**

- watch out for “bitter weeds”
- *Helenium amarum* (Asteraceae)



- goldenrod is great!
- *Solidago* spp. (Asteraceae)

**fall with the bees**

- drones ejected when flowers get scarce



**fall with the bees**

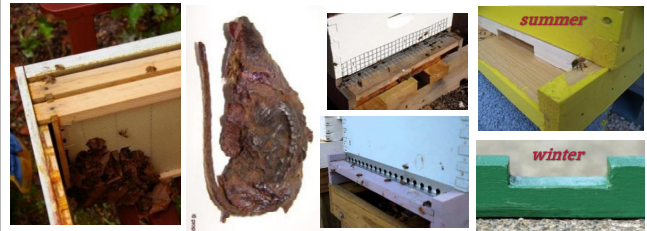
- determine if pest control is necessary
- consolidate hives to minimum space
- ensure minimum 45 lbs of honey for winter



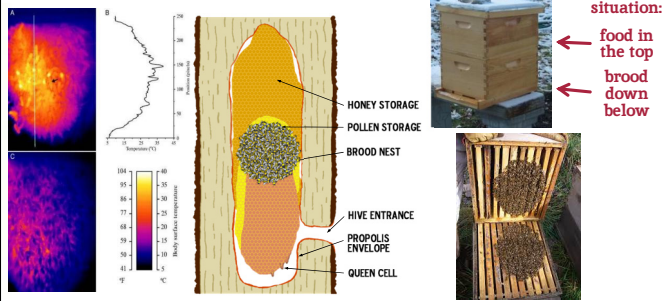
that's a little more than a medium super full of honey, a little less than a deep

**fall with the bees**

- install mouse guards
- before night temperatures get below 57oF (14 C)



**winter in the bee yard**



**winter in the bee yard**

- leave them alone
- occasionally check food stores
- remove snow/ice blocking entrance



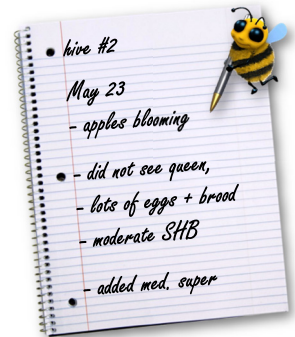
### winter for the beekeeper



- consider your first year with honey bees
  - what have you learned?
  - what would you change?
  - plan to expand?
    - order early!

### record keeping

- useful habit
  - inspection details
  - hive manipulations
  - honey flows & harvests
  - queen origin
  - expenses
  - profits
  - floral blooms
- record on paper
- digital record software



# Bee Hive Inspection Record

<b>hive name:</b>		<b>date:</b>	
<b>bee yard location:</b>		<b>time:</b>	
<b># brood chambers:</b>	<b># supers:</b>	<b>queen excluder:</b> <input type="checkbox"/> no <input type="checkbox"/> yes	
<b>hive temperament:</b> <input type="checkbox"/> calm <input type="checkbox"/> nervous <input type="checkbox"/> defensive			
<b>entrance traffic:</b> <input type="checkbox"/> high <input type="checkbox"/> medium <input type="checkbox"/> low <input type="checkbox"/> with pollen			
<b>saw queen:</b> <input type="checkbox"/> no <input type="checkbox"/> yes        marked? <input type="checkbox"/> no <input type="checkbox"/> yes - color:			
<b>laying pattern:</b> <input type="checkbox"/> excellent <input type="checkbox"/> mediocre <input type="checkbox"/> poor			
<b>eggs seen:</b> <input type="checkbox"/> no <input type="checkbox"/> yes			
<b>bee population:</b> <input type="checkbox"/> heavy <input type="checkbox"/> moderate <input type="checkbox"/> low			
<b>queen cells:</b> <input type="checkbox"/> no <input type="checkbox"/> yes		<b>excessive drone cells:</b> <input type="checkbox"/> no <input type="checkbox"/> yes	
<b>honey stores:</b> <input type="checkbox"/> high <input type="checkbox"/> medium <input type="checkbox"/> low			
<b>pollen stores:</b> <input type="checkbox"/> high <input type="checkbox"/> medium <input type="checkbox"/> low			
<b>disease symptoms:</b> <input type="checkbox"/> chalkbrood <input type="checkbox"/> nosema <input type="checkbox"/> EFB <input type="checkbox"/> AFB <input type="checkbox"/> DWV			
<b>pests:</b> <input type="checkbox"/> varroa mite <input type="checkbox"/> tracheal mite <input type="checkbox"/> SHB <input type="checkbox"/> wax moth			
<b>hive conditions:</b> <input type="checkbox"/> normal/healthy <input type="checkbox"/> brace comb <input type="checkbox"/> excessive propolis <input type="checkbox"/> normal odor <input type="checkbox"/> foul odor <input type="checkbox"/> equipment damage <input type="checkbox"/> other:			
<b>actions taken:</b> <input type="checkbox"/> added feeder <input type="checkbox"/> fed hive <input type="checkbox"/> added super(s) #: <input type="checkbox"/> swapped brood chambers <input type="checkbox"/> requeened <input type="checkbox"/> split hive - new hive name/#: <input type="checkbox"/> other:			
<b>medications:</b> <input type="checkbox"/> added <input type="checkbox"/> removed			
<b>recommendations:</b> <input type="checkbox"/> add supers <input type="checkbox"/> split <input type="checkbox"/> replace queen <input type="checkbox"/> needs SHB trap <input type="checkbox"/> swarming imminent - needs monitoring <input type="checkbox"/> test varroa level <input type="checkbox"/> replace equipment: <input type="checkbox"/> other:			

**interesting observations:**