

The How and Why of Reading Brood Frames

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IDENTIFY WITH APPROPRIATE LETTER: Capped Brood; Drone Brood; Honey;
Nectar; Pollen (likely position); Eggs (or where to look); Queen Cups/Cells.
IS COLONY QUEENRIGHT & BROOD PATTERN OK? IS BROOD HEALTHY?

What if there are NO EGGS present (on frame above)?

- no queen present
- new virgin/newly mated queen present – not laying eggs yet
- look on another frame – this one filled with cells of mostly capped brood
- end of season or drought conditions or pollen resources no longer available
- bees preparing to abscond (or swarm)

What if no pollen evident (on frame above)?

- no young brood to stimulate pollen foraging
- numbers of cells filled with fresh nectar
- no space – look on another frame especially frame at edge of brood sphere
- pollen dearth or drought or heat spell
- bees preparing to abscond (or swarm)

What if there is no drone brood (or queen cells) on any frames?

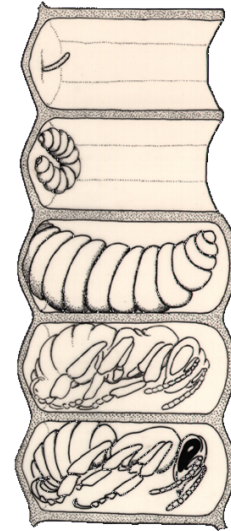
- end of foraging season
- pollen dearth or drought or heat spell
- look on another frame – no space here
- look again at margins of frames and at comb between boxes
- not rearing queens (cup presence OK) because _____

Key All 5 choices are possible answers - Best Answer =middle choice

LOOKING FOR EVIDENCE OF QUEEN

Do you need to see the queen?

- yes Yes Because _____
- no Why Not? _____
- What is “test” if unsure queen present or not? _____



If you do not see the queen, you should...

- see capped brood or
- see open larval brood or
- see eggs (should be 1/cell, rarely 2)
- see developing queen cells means _____
- always**: evaluate the brood pattern/healthfulness
- determine if environmental conditions are poor
- test**: transfer frame of open brood from another hive

What else should you read on the brood frame?

- Area being reserved for brood (cleaned & ready for queen)
- nectar filled cells in brood area (backfilling) or to top and sides of brood sphere
- fresh pollen in cells vs stored (glazed) pollen cells (bee bread); moldy pollen
- queen cups** vs queen cells (i.e. empty vs occupied with eggs/brood or capped)
- condition/age of drawn cells, amount of drone brood cells
- overall brood pattern (is pattern spotty i.e., ‘shotgun’/scattered/“missed” cells)
- placement of eggs in cells with eggs (and how to see eggs?)
- drones in worker cells (**drone layer; laying workers**); high drone numbers
- normal looking cappings over brood & honey; drone cells with raised cappings
- dead brood (disease, chilling, pesticide kill, genetic issues)
- mites present?
- evidence of pests (mice; SHB; wax moth; other _____)

WHY & How of the BASIC HIVE INSPECTION? CSI (=crime scene investigation)

1. Examine apiary – colony entrance – placement of colonies
2. Smoker management – + ‘comfortable’ hive attire
3. Opening technique – removal of top box & 1st frame
4. Finding the brood sphere – opening the ‘book’ and reading the mystery story
5. Management of colony following your CSI “findings”
6. Closing the colony and recording information