

## April Beekeeping Tasks

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## Spring Management Begins In The Fall

- Check for general health
- Evaluate the Queen
  - Brood Pattern
  - Number of frames of brood
- Check for population
- Check for diseases and mite levels
- Treat if necessary
- Arrangement of honey in the hive

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## Spring Management Begins In The Fall

- 60 -80 lbs. of honey
- Entrance reducers
- Top ventilation
- Wind breaks
- Bricks on hive tops
- Wrapping hives

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## Over Wintering Management

- Check periodically over winter for hive weight
- Most hive starve in February and March
- Try not to open the hive below 40 degrees F
- Be ready for emergency feeding
  - Dry granulated sugar
  - Sugar cakes
- Consider feeding protein products
  - Protein Patties
  - Protein sugar blocks
- Clean up dead outs / try to determine why they died

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## Temperatures For Checking Hive

- Below 30 degrees F
  - Open only in emergency to feed
  - Dry sugar can be fed
- Below 40 degrees F
  - Open only in emergency to feed. Bees can't get far from the warmth of the cluster at below 40 degrees F
  - Feed must be placed directly above the cluster

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## Temperatures For Checking Hive

- Below 50 degrees F
  - At 50 degrees F bees are loosely clustered. The hive can be opened but the brood combs should NOT be removed. Side combs can be removed to look at the brood combs, but must be replaced quickly to avoid letting the brood get chilled.

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### Temperatures For Checking Hive

- 50 degrees F
  - Bees begin to fly at 50 degrees , especially for cleansing flights. Honey bees will not defecate inside the hive unless they have Nosema-honey bee diarrhea They will also begin flying to collect nectar and pollen if it is available. Hives can be opened, but care must be taken to avoid chilling brood.

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### Temperatures For Checking Hives

- 60 degrees F
  - Complete hive inspection can be made, but brood comb should be returned to the hive quickly.
- 70 degrees F
  - At 70 degrees F it is warm enough to completely disassemble the hive and frame for a thorough inspection

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### Hive Inspection Sheet



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### Look For The Queen

- Good brood pattern
- Brood in various stages



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### Re-Queening a Hive The Importance of Re-Queening

- Heart of the Colony
  - All positive and negative characteristics of the colony flow from the mother Queen
- Advantageous to re-queen every 1 to 2 years
  - Most productive first year. More bees translate into more honey.
  - Colony less likely to swarm
- Failed re-queening attempts
  - Spring endangers major honey flow
  - Fall endangers over wintering
- Lengthy Queen less Makes it Harder to re-Queen
  - Loss of Young Brood
  - Laying Workers Can Develop



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### Does Hive Have Sufficient Food

1. **Honey** – Energy, Sugar, Carbohydrates
2. **Pollen** – Protein, Vitamins, Minerals
  - ☐ When feeding bees –
    - White granulated sugar is the most suitable source today
    - Pollen and water may also need to be supplied
    - Avoid feeding honey as it carries the risk of spreading bee diseases
    - Use the right method, time and type of feeder for the task
    - Take care to avoid robbing
  - ☐ Bee candy and patties –
    - Candy and patties are used to supplement honey bee colonies in the winter

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### Recipes

*(Faint, illegible text listing various recipes for beekeeping)*

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### More Recipes

*(Faint, illegible text listing various recipes for beekeeping)*

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### Treat for Diseases and Hive Pest

#### Parasites and Pest

- > Varroa Mite
- > Tracheal Mite
- > Small Hive Beetle
- > Wax Moth (Greater or Lesser)
- > Zombie (Phorid) Flies (Zombees)
- > Ants
- > Bears, Raccoons, Skunks, Mice



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### Treat for Diseases and Hive Pest (cont.)

- Fungi
  - Chalkbrood
  - Stonebrood
  - Nosema
- Bacteria
  - American Foulbrood
  - European Foulbrood
- Environmental Contaminants
  - Pesticide Industrial Chemicals
- Virus
  - Sac brood
  - Deformed Wing
  - Black Queen Cell
  - and a host of others

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### Unite a Weak or Queen less Colony

- ✓ One hive is weak
- ✓ One hive is Queen less
- ✓ Two hives are weak




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### Swarm Prevention

#### Causes of Swarming

- ✓ Overcrowding
  - No place to put nectar so the brood nest is clogged.
    - Add supers
- ✓ Honey or Pollen Clogging the Brood Nest
  - Remove combs of honey and add empty frames to occupy bees drawing wax
- ✓ No Place to Cluster
  - Slatted racks
  - Follower boards
  - More supers
- ✓ Not Enough Ventilation
  - Screen bottom boards
  - Top entrances



#### Additional Measures to Prevent Swarming

- Splits
  - Walk away, Even, Demaree
- Hive Body Rotation

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### Rotate Hive Bodies

1. Be sure the nights are warm enough not to chill the brood.
2. Check and make sure all capped and uncapped brood is found in the upper hive.
3. To rotate, simply reverse the locations of the hive bodies. Place the bottom one on top and the top one on the bottom.



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### Prepare Honey Supers

Top Supering/Bottom Supering

- Top Supering
  - It's faster. You just drop the new one on top.
  - It's less work. You don't have to lift the other supers off and put them back on.
  - It's easier to see when you need to add yet another super. You just take the lid off and look.
- Bottom Supering
  - Bees begin working in the new super sooner if it is closer to the brood nest.
  - It reduces travel stain because the bees do not have to walk over capped honey to get to new storage area. Important for comb honey producers.
  - Bees expend less energy because they do not have to walk as far.

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### Installing Bees from a Package

- Make-up of package:
  - Queen in cage; can of sugar syrup; 11,000 honey bees
- To install bees into assembled hive:
  - Open bee package; remove syrup can and queen cage; set cage into hive body
- Prepare (remove cork) and install queen in cage between remaining frames
- After 4~5 days:
  - Check that queen is released
  - Remove empty bee package

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### Package Installation



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### Prepare Swarm Traps

Trap Requirements

- The right size
  - Ten frame langstroth deep
- Entrance
  - 2 Square inches
- Lightweight
- Durable
- Weather Tight
- Economical
- Easy to Transfer
- Use standard deep frames
- Scout Bee Friendly
  - Old Comb
  - Lemon Grass Oil
  - Propolis
- Ideal Height
  - 12-15 feet off the ground
- High Visibility
- Full Shade
- Large Trees
- Edge of Woods
- Along County Roads
- Fence Rows
- Places Bees Visit
- Sources of Water
- Where Bees Exist

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