



■ Managed bees are happy bees!

1st Year

Management



Goal Oriented Beekeeping

A close-up photograph of a bee on a yellow flower head, positioned in the top right corner of the slide.

- **Beekeepers who work towards goal typically have the best success**

- **First Year Beekeeper Goals**
 - Learn new skills
 - Master mite counting
 - Provide good nutrition to ensure healthy bees
 - Prepare the bees for the winter

Wintering Requirements



- 1. Clean, dry hive**
- 2. Strong laying queen**
- 3. 5-lbs of winter bees**
- 4. Mite-free**
- 5. 60-80 lbs of honey**
- 6. 3-4 Frames of pollen**
- 7. Sunny, sheltered location**

When to Start Winter Preparation



- **The race to get 5-lbs of winter bees**
 - 6-Weeks of brood starting September 1
 - 8-10 frames

- **Mite-free**
 - By September the hive is loaded if you don't take action to control mites

When to Start Winter Preparation



■ Honey

- Mid-May & June and 3-weeks in September
- That's 9-10 weeks to gather 52-weeks worth of food!
- What if there isn't a fall flow?

■ Pollen

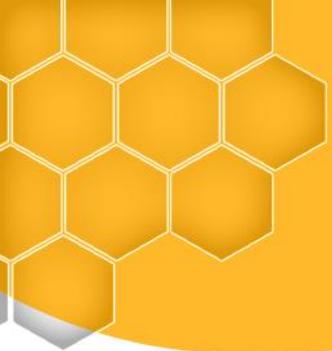
- Usually there is enough goldenrod, but...

When to Start Winter Preparation



- **Location, location, location**

- Sunny, sheltered, and dry
- Did you think about January when you located your hive this spring?
- You can easily move hives in the cold wintertime!



Management For Winter Starts Now!

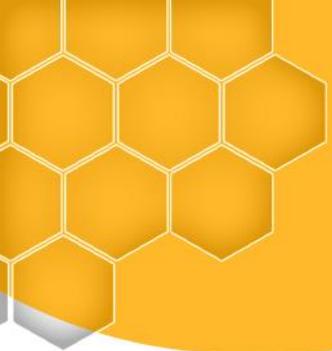


LOGO

What is Management?



- Beekeepers like to divide management up into spring, summer and winter
- This works for us as a memory model, but for the bees...
- Beekeepers tend hives on a touch-base schedule, but the bees are there 7x24
- There is only one kind of management!



Continuous!



Let's Manage Bees! August



- Mite Control
- Population still declining
- OK to reduce frequency of inspections
- Ventilation, water, weed control around hives...

Let's Manage Bees! September



- **Feed 1:1 sucrose syrup on September 1 for about a week (about 1-quart)**
 - Stimulates brood rearing and kick's off winter brood cycle for winter bees
 - Feed protein patties as well even if they don't take them
 - Give extra honey supers only after filling the upper brood chamber (compress)
 - Switch to 2:1 on September 15, if no nectar is flowing into the hive

Let's Manage Bees! September



Let's Manage Bees! September



Pest Control

- Install mouse guards
- Reduce entrances to prevent robbing

Let's Manage Bees! September



Important notes

- **Brood rearing begins to stop**
- **Begin to cluster at 57 F**
- **Mite Check and Treatment!!**
 - Aim 2-3% (6-9 mites per 300)

Let's Manage Bees! October

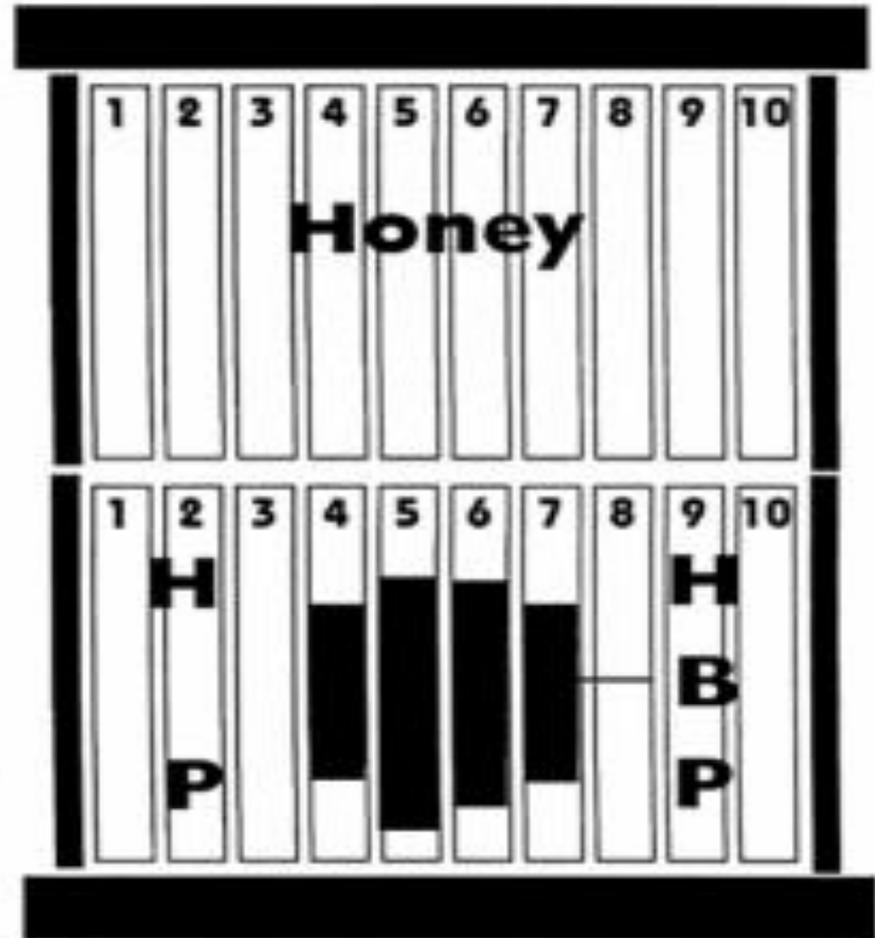


- Count capped honey frames. Figure 6.5 lbs for deep and 3.5 lbs for medium
- Subtract total count from 70 and feed the difference in 2:1 sucrose syrup
- Figure 11-lbs per gallon of syrup
- No need to over-feed
- Start October 1 and end Mid-November
 - (temp dependent)

Let's Manage Bees! October



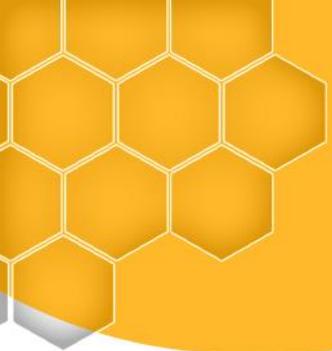
- What is our goal to start winter?
- Honey
- Brood/Pollen/Honey



Let's Manage Bees! November



- **Remove extra boxes leaving two brood chambers**
 - You can winter in 1-deep if that's all they have filled out
- **Ensure that you have 60-80 lbs of honey or leave that extra honey super!**
 - Remove queen excluder
- **Consider installing wind breaks**



To Wrap or Not to Wrap



Is It Necessary?



**Does Cold
Kill Bees?**

**Moisture
Problems**



Bottom Entrance

Mouse Protection

Upper Entrance

Inner Cover Insulation











LOGO









Ready To Wrap

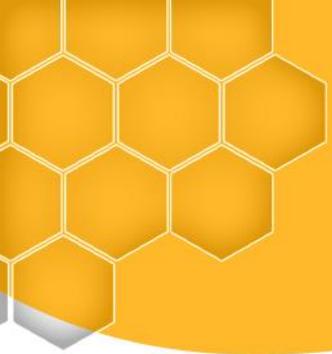


Installing Wrapper









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Top of Hive Insulation



- **What about the top of the hive you ask??**
- **Anyone please ask..**
- **Bueller?**

Top of Hive Insulation

- Feeder shim board is a must
- Homasote
- Quilt cover
- Insulation board



Top of Hive Insulation



- Feeder shim board is a must

- **Homasote**

- Quilt cover

- Insulation board



Top of Hive Insulation



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Top of Hive Insulation



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Top of Hive Insulation



Polystyrene Insulation ↗

↖ Outer Cover

↖ Inner Cover inverted for winter

Wood Spacer For ↗
Dry Sugar On
Top Of Newspaper

GardenFork.TV

LOGO

Will They Survive Winter?



- **They will survive the winter if they are not sick from varroa infestation or other maladies**
- **Other than sickness, all other common problems are correctable**
- **Ample food stores**

January Inspection



- In the first 10-days open the covers and check the bees
 - You can do this at any temperature, but look for a warm day. Don't put-off if it is cold!
- Don't pull out any frames or separate the boxes – just look down onto the top bars
- Small tight cluster indicates plenty of food
- Large loose cluster indicates lack of food (unless it is a 60+ degree day)

Mid-Winter Emergency Feeding



■ **Dry Sugar, or Sugar Cake**

- Lay newspaper over the top bars
- Place empty super over the newspaper
- Pour 10-20 lbs of sugar onto newspaper
- Replace covers

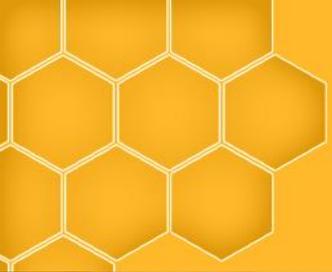
■ **Sugar cake, not homemade fondant!**

- 5-lbs sugar mixed with 1-cup cold water
- Pat into a cake or brownie pan
- Let sit until hardened
- Place chunk or chunks on newspaper as above

Winter Feeding







Late Winter



- **Feed protein patties and 2:1 sugar syrup starting March 1 to get the surviving colonies on their feet for the upcoming spring**
- **Second year requires additional skills most notable is swarm control!**

Winter Checklist Recap



- **Queenright**
- **Good population**
- **Mite control**
- **Disease free**
- **Food stores ample**
- **Food strategically located for brood**