



The Managed Mentoring Program on getting started in beekeeping.

Managed Mentoring



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The Calendar of Summer

Lesson | Critical Summer Management



What is Covered in this Module

Managing Varroa Mite Dynamics

Winter Bees Mindset

Mite Dynamics

Clean Winter Bees

Proactive Corrections



Healthy Bee Imperative

- ❑ Late Spring, Early Summer is make or break
 - *What you do in this period has the most impact on hive survival*

- ❑ If you want your colony to survive!
 - *You must be hyper vigilant in the June/July timeframe, and maintain vigilance all the way until November*
 - Start early and you have time to correct just about any situation.
 - Start late and you risk it all.



Without Mite Management

□ Healthy colonies are compromised

- *When the ratio of mites and bees goes out of balance, the colony struggles to cope*
 - Colonies that are thriving often hit the wall in early summer if they are carrying a mite load.
 - More than anything, these colonies especially need to be monitored
- *When monitoring indicates – they must be treated **early** to prevent an overwhelming impact from Varroa Mites*
 - This is the most important dynamic to understand today if you want any chance of succeeding as a beekeeper in these times



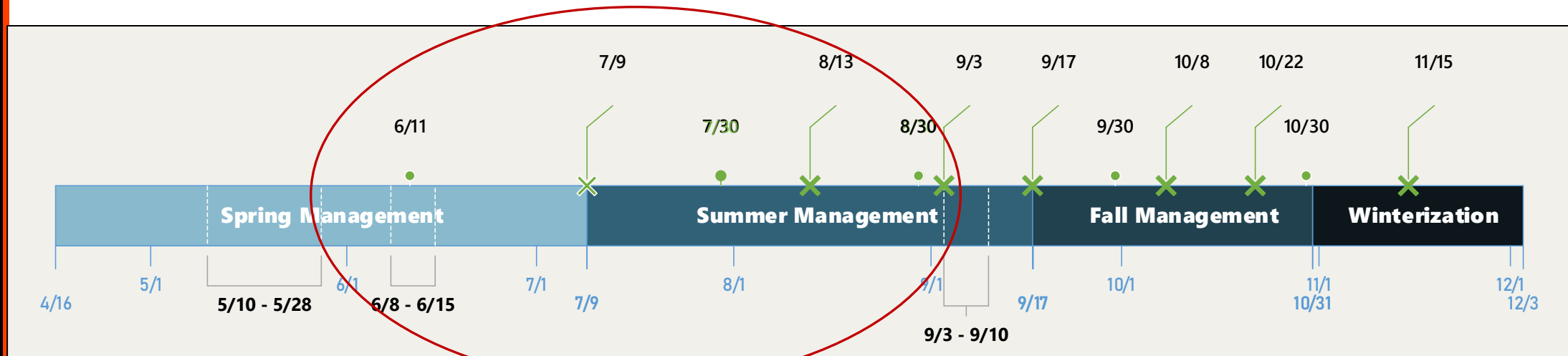
Summer Management

□ Switch to a winter bee mindset

- *Summer (early July in NJ) is the time to consider that the future generation of bees will eventually be winter bees.*
- *It is this time that you especially need to monitor and keep the colony healthy – as well as assure a good operational queen.*
 - Low mite loads + Good brood patterns
 - Feed during the lull (if applicable)
 - Monitor frequently and treat when required
 - Monitor at least monthly
 - Take corrective actions while there is time



First Year Calendar

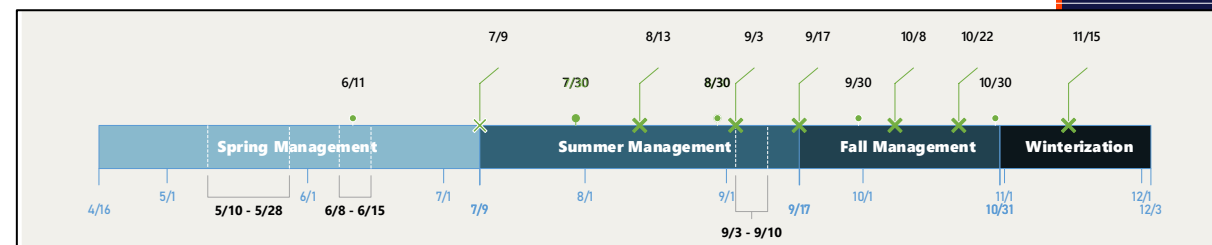


□ Key Milestones and Activities Noted

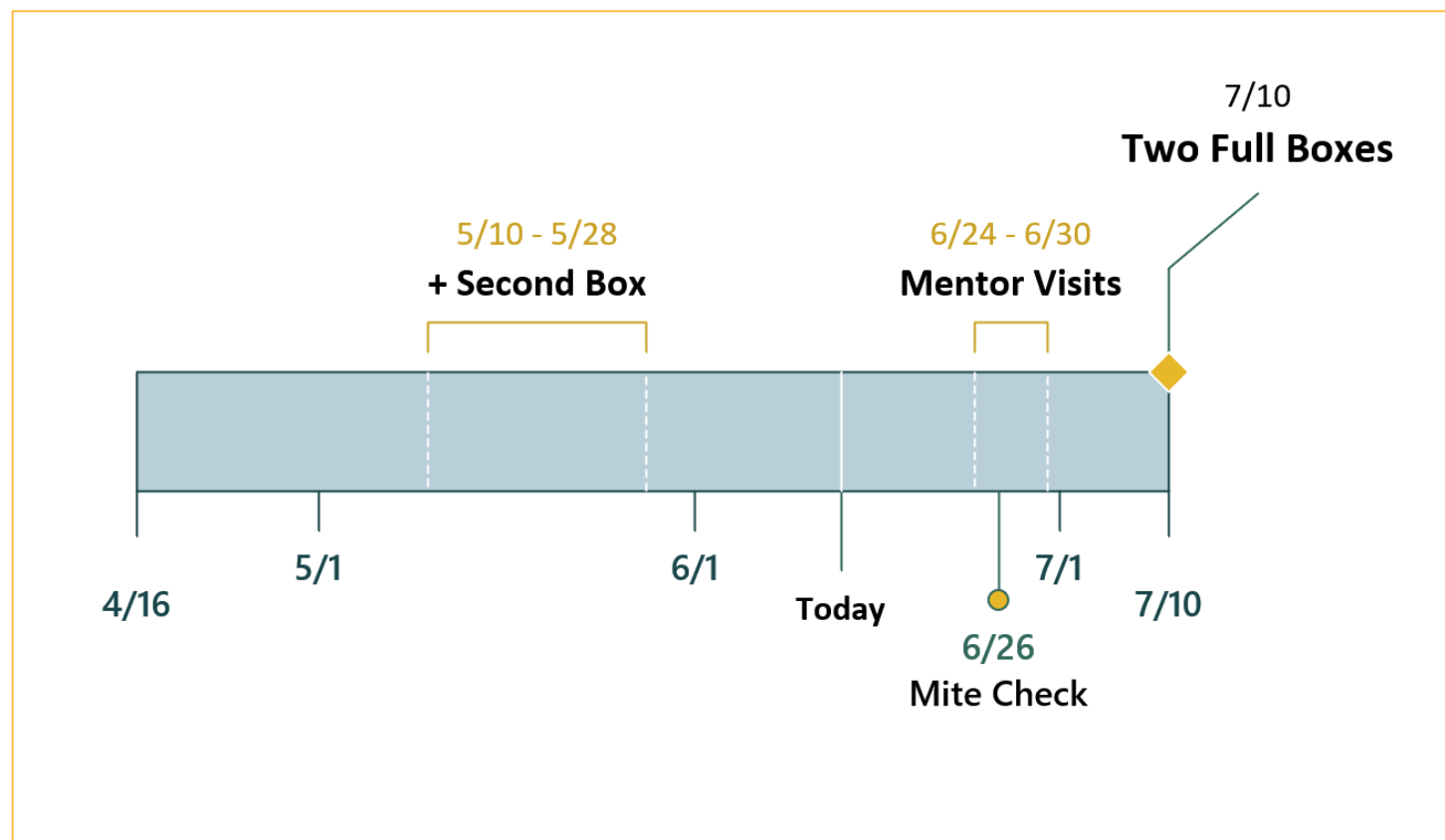
- *We will take each time period and review them*
- *Our goal is to be buttoned up and ready for winter by October 31st*



Spring Management



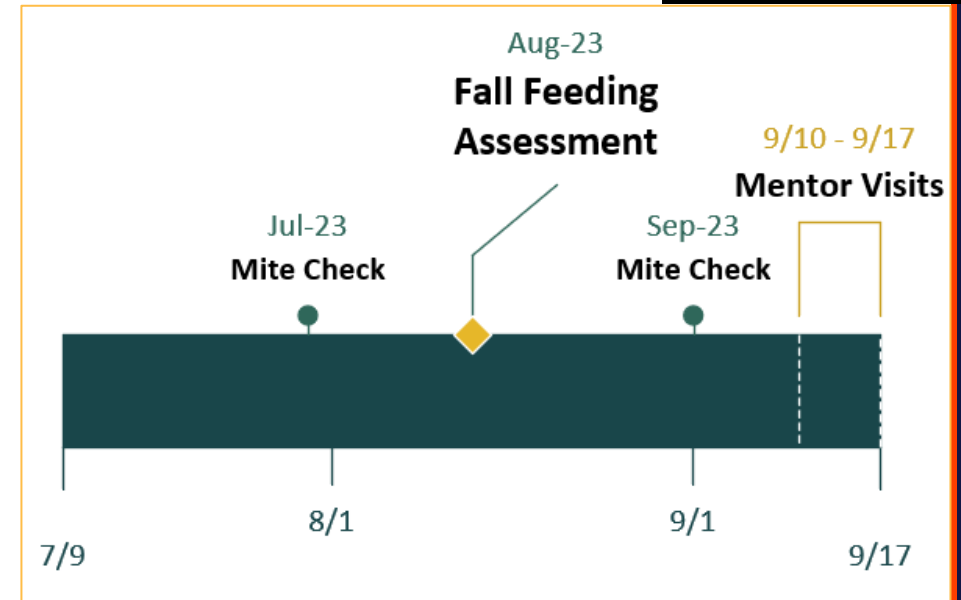
□ Where we are: Spring Management Milestones



Summer Management

□ Preparation for Winter

- *Feeding and building population for winter*
 - Summer in pockets of the Mid-Atlantic is often a time of dearth: feed the bees
 - Maintain populations in anticipation of late summer buildout of winter bees
 - Begin the load in of winter stores of honey
- *Varroa Mite Management*
 - Critical time period for keeping varroa mites at bay
 - Healthy summer bees; They are the ones that will build winter bees.
- *Mentor visits in late summer (as needed) – ensuring proper leadup to fall*



Mites and Brood Dynamics

□ Mites favor the brood

- *The mites reproduce and feed off the developing brood*
 - They go into the favor the drone brood when it is available
 - **When colonies cease producing drones, mites switch over to worker bees.**
- *The reproductive female mites gravitate to the nurse bees*
 - As the ride on their worker bee host, they feed until going into cells for reproduction
 - They hop off the nurse bees (after feeding on them) on their quest to move into the developing brood to do continue feeding and reproduce



Winter Bees

□ August through October

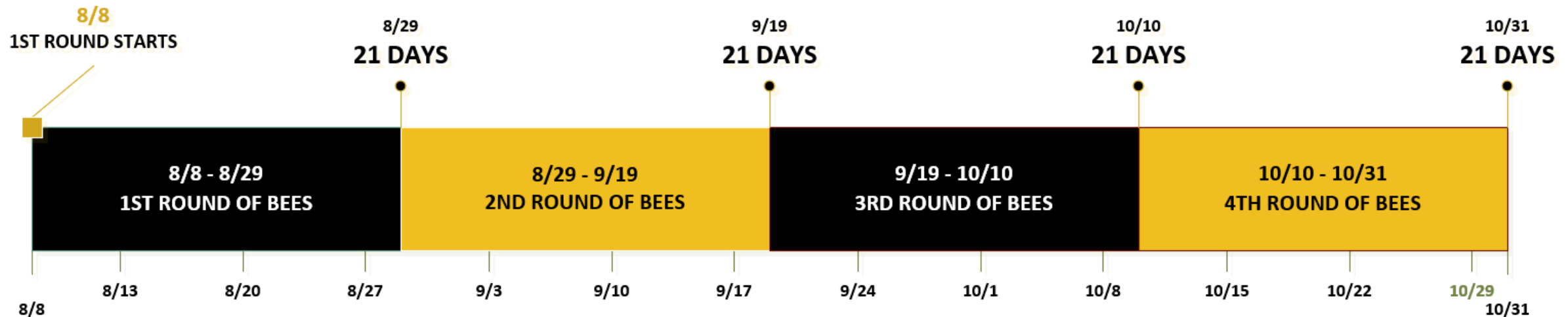
- *If a bee takes 21 days to emerge, then how many of those 21 day windows do you have from August to November – and winterization?*
 - There are about 4 to 5 generations of bees before winter bees are established
 - In this time period bees change over from short term lifespans to ones that will live overwinter – they physically change in several ways
 - Think of the bees that are raising those bees....
 - **If they are sick, they will share that through brood food to the young.**
 - **Couple that with the onslaught of the varroa mites in the cells feeding on the developing bees.**



Winter Bees

■ 4-Cycles (of 21 days)

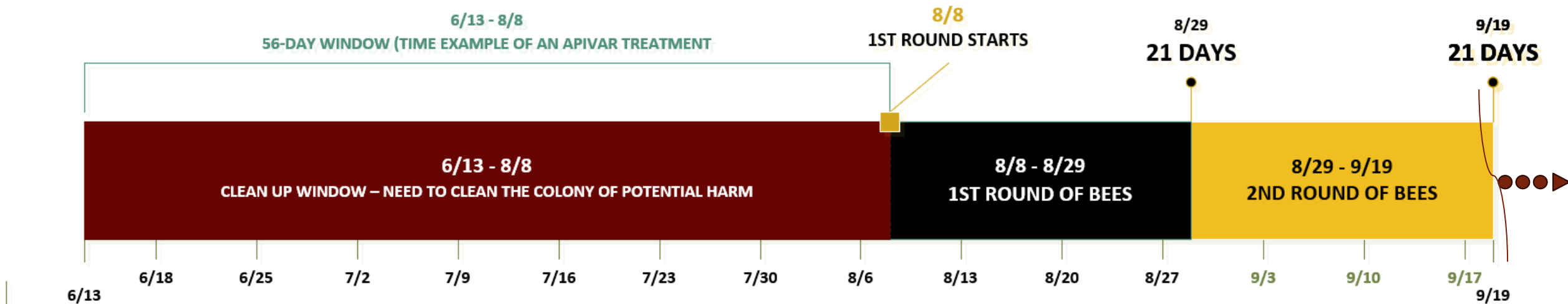
- In NJ our first frost can come as early as Nov 1.
 - *Some years it is Nov 1, other years it might be Thanksgiving*
 - *Since we cannot tell, we plan for Halloween (Oct 31)*
 - *By Halloween, we want our bees are fat and happy*
 - And we want all honey ripened and pollen stores flush throughout the comb.
- We want a cycle of 4 generations of **CLEAN Bees** to overwinter, and that starts August 8th.

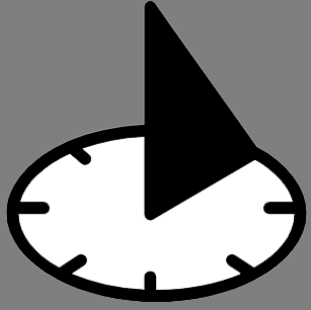


Clean Up Window

■ In Advance of August 8th

- Consider that we want to start with no mite impacts by August 8th
- This means we need to finish treating by 8/8
- What if we choose ApiVar? (56-day treatment window)
 - *Working this backwards, 8/8 – 56 days – that's June 13th*
 - *This means that we will want to monitor and treat (as necessary) by early to mid June*





summer solstice
June 20th or 21st

Winter Bees

- **Winter bees start in summer**
 - What you do in spring and summer impacts survivability for winter
 - Winter bees are thought to start on the journey to switch over after the summer solstice

- **Months, not weeks**
 - Fair weather bees live for weeks
 - Winter bees must persist for months
 - *And they are doing hard work in generating heat for the colony during the duration – which means they must be healthy*





This is no way to overwinter your bees

Feed for Summer

- ❑ See the summer/fall feeding lesson
- ❑ Top Feeder & Maintain Water
 - *One Top feeder for each hive recommended*
 - Feed during summer (water and/or sugar solutions)
 - ❑ 1:1 water to sugar for summer, 2:1 sugar to water when temps cool as fall approaches
 - Sealed deliver does not heighten robbing during dearths
 - Bridges colonies to fall flow, if your area has one, or keeps them flush in anticipation of winter stores build out



Monitor & Watch for Health

□ Monitor Monthly (Jun/July to Oct/Nov)

- *Maintain vigilance for colony mite loads*
 - Proactive monitoring helps you to get ahead of any problems.
 - Make sure that you monitor after treatments – don't assume it worked
- *Review developing brood and emerging bees for problems*
 - Developing brood should be in a pool of jelly, look pearly white and well fed
 - Bees emerging should not have deformed wings
 - Brood patterns should look contiguous, not spotty, and with signs of



2 Full Boxes +

- **By summer, colonies should be to full size**
 - *Two full deeps of bees and comb (3+ mediums if all-mediums)*
 - *Ideally some additional boxes built out (mediums for honey supers)*
 - *Quite possibly one or more honey supers to extract*
 - Especially if you started with Nucs in the early season
 - As a point of interest – It has to be noted that some beekeepers get Nucs in April, others only take possession of them as late as early June



Correct Problem Situations

- **Problem Situations = Not Normal :-)**
 - If they are too small, then why.
 - *New queen, bolster by feeding, or combine*
 - If they are not healthy.
 - *Monitor, Treat, Give clean comb if applicable*
 - If they have a queen problem (dud, drone layer, poor patterns) requeen
 - *Do this now while good quality queens are still out there. The later in the year this goes, the hard it is to find the time to recover and get viable queens*
 - Poor comb: Now, Today!, give them new comb to start or feed them 1:1 and ensure they have new bees that will build wax. Be proactive.



Closing Comments

- **Customary Close**
 - Where we stand, where we are going...
 - *This module closes out a review of important summer activities*
 - *Our next lessons focus on:*
 - Colony Growth and planning for more than 2 boxes
 - Summer and fall feeding
 - Preparations for a fall nectar flow
 - And ensuring your queen is viable through the seasons



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.*

