Blog – What Is Your Beekeeping Method

Failure to Plan is a Plan to Fail

What is Reactive Beekeeping?

There is more information available to help beekeepers succeed than ever before. That said, we have met several beekeepers who quit because they thought beekeeping would be hands off, and easy.

What is Proactive Beekeeping?

Proactive Beekeeping is where you track what happens each year and then look for a trend or a pattern. When you find the pattern, then you back track 2 weeks and develop a strategy to prevent the Problem.

Why Does It Matter?

I guess being an analyst I look at the world differently. First, I collect data. Second, I started to realize that we had spent hundreds of dollars on treatments, only to lose the hives. After studying I realized that the damage was already done. Then I tried to develop a plan to prevent the problem.

At first we accepted that we needed to lose about 50% of hives each year, or more.

We accepted without question that:

- 'bees are bugs, what will happen will happen,' was the truth.
- winter die-off was due to mites.
- any weakness or brood problem was the queen.
- only bad queens swarmed.
- you could use the same frame for years and years, as long as the queen was laying something in the cell.
- all queens were mated well if we purchased them.
- bees abscond because of mites.
- treatments do not work. Treatment free is better.

We never questioned these statements, even though a few hours on YouTube would show us university research that stretched for decades proving those 'old wives' tales' are 100% wrong.

I started to research and see if there were any answers. This is when I found that the entire bee industry was divided into two camps, the old-time beekeeping methods, and the scientific beekeeping methods.

The problem with this is that the 'old-time beekeeping methods' were not following old time knowledge. There are hundreds of years of knowledge that was ignored by beekeepers as they continued year after year on a 'trial and error' method of beekeeping. Like, John and I were.

The problem with most scientific beekeeping is that the research has been done by people like Brother Adam at Buckfast Abbey. Even 'modern' techniques like brood factories were only 'rediscovered' by beekeepers like Michael Palmer. Dr Seeley rediscovered and verified information that had been known for hundreds of years. (I do not fear offending either of these men, because I am just quoting what they have said.)

The newest 'practical scientist's bee scientist on the scene is Randy Oliver. His 'data over dogma' statement, and 'whatever works for you' really changed our mindset. He brings a unique perspective to beekeeping because he has been a beekeeper since 1966, and he has degrees in biological science. Scientific Beekeeping - Beekeeping Through The Eyes of a Biologist

The one thing that he woke in me was the freedom to do my own experiments. I didn't need to keep looking for what other people said. If I found a method that worked, or that other people were talking about, then I could test it myself. But, to conduct a viable experiment, you need to develop parameters. To do that, you need to understand the experiment. To do that you need to learn.

"It's what you know for sure that keeps you from learning." Randy Oliver

I took a step back from 8 years of beekeeping, and went right back to the beginning beekeeper notes, blogs, books, and YouTube videos. As I watched them I started to learn that there are a lot of people who are regurgitating what had been told to them without any regard to whether it works or not.

If you want to get ousted among a group of beekeepers, wait until someone has talked for 10 minutes about their methods. Watch everyone listening raptly and nodding their heads. Then, ask one of two questions:

"Did it work?"

"What is your survival rates?"

In many beekeeping circles these questions are taboo. They are the ‘words that must not be spoken.’

As my journey evolved I started to gravitate towards beekeepers who had something to lose. For example, a couple in the USA who need to breed 1000 queens because if they don’t, they will lose the farm. Or, A beekeeper who needs to grow their own queens because their costs are so high that cutting out the cost of queens each year for 1000 hives makes the difference between living well, and barely paying the bills.

This phase of my journey lasted almost a year. But I started to see that there were holes in their methods. They worked, and often worked well, until they didn’t. The problem I found was that they just accepted a bad year and never looked for a solution.

I also went on a tangent based on breeding top dogs for over 40 years. You cannot breed a top temperament, conformation, and working ability without understanding genetics, alleles, and what each sex passes on. Of course, **polymorphism** threw a wrench into my belief that I had a good understanding of genetics. But I did know one thing, hybrids are always stronger, even hybrids from the same breed that might be from different lines or areas. But that wasn’t the end, I also had to understand how the hive responds to a poorly bred queen. The impact of hygienic behavior and disease resistance on inbreeding and line breeding. And, the effects of misunderstanding bee behavior, for example, workers removing brood because it is too closely related to them, and removing brood because it is sick.

I think the best thing that happens was when I came across a short video. I do not remember who the woman was, and I have never found that video again. But she asked a bunch of questions like these.

I would like you to answer these questions

- Do you wrap hives in the winter?
- Do you ventilate in winter?
- Do you split hives, use the Demaree method, or create nucs?
- Do you feed probiotics, hive alive, UltraBee, pollen patties?
- Do you feed syrup?
- Do you overwinter in a double or single?
- Do you raise your own queens?
- What is your overwintering success rate?
- Do you prevent swarms by creating nucs, splits, use the Demaree method, or let nature take its course?
- Do you kill Queen cells?

- Do you have a cell finisher, or incubator?
- Do you use fondant or candy board?
- Do you feed in late February or March?
- When do you unwrap your hive?
- What growing zone are you in?
- What is the first pollen of the year?
- When do bees in your area start building up?
- Do you help weak hive by sharing brood from another hive, do you combine, or do you let the hive die?
- Do you buy queens or nucs? If so, do you buy local or imported?
- Do you prefer nucs or packages?

Then she looked at the camera and said 'why'. If you don't know why, then you have no power to change your belief. In the attached PDF I answered these questions for myself. The task of writing down these answers and then working in the hives to determine whether my decision was a good one, made it easier to evolve as a beekeeper.

ATTACHED PDF

How We Created our Beekeeping Method – Step 1

There is more information available to help beekeepers succeed, but most beekeepers are not willing to invest the time needed to study. Instead, they wait until something is wrong and look for a fast, easy way to solve it.

There are no right or wrong answers here. The purpose of this exercise is to find out if you can answer 'why'. Beekeepers don't make mistakes because they are doing the wrong thing. It has more to do with them not understanding why?

Why?

If you cannot write out your 'why' then you are going to mix and match beekeeping methods that may not be compatible. Also, if you do not understand why you do something then you will be forced into a reactive beekeeping method. You will constantly think everything is good, until it isn't. Then, you will scramble to catch up and fix the problem.

After talking to dozens of beekeepers I've learned that The Secret of Beekeeping is to prevent problems before they happen. Bees do not recover well from setbacks or problems. Even a short problem which causes a brood break, or low brood, will create a domino effect.

Examples:

Swarm

When you see a queen cell, it is most likely too late to stop the swarm. The queen often leaves before the virgin emerges. Now you have a weak hive. The cell might not become a virgin for at least 16 days. Then it needs 1 – 2 weeks to start laying. Your hive has just lost 1 month of the summer. And, when she does start to lay all the nurse bees are wax bees, guard bees, or foragers – not nurse bees. After this month, your hive needs to start building up for the winter.

Varroa Mites

When you see a mite on a bee, then you have to remember that the mite cycle might have completed 1 – 3 cycles already. Waiting until there are 1500 mites in a hive is 'reactive beekeeping.' The damage from viruses and bacteria may already be done. The lower levels of brood will affect the success of the next cycle of brood, throughout the rest of the year.

Queen Issues

I am still guilty of this one. You had a great Queen in the spring, but she has stopped laying. You give her another week, then another. You just don't want to pinch her. The problem is that a queen needs nurse bees to warm cells so she can lay. The foragers need young bees to take the nectar when they come back. But, you now have mostly foragers, and almost no nurse bees.

The Guessing Beekeeper Method

Each of those examples can make it easy for a beekeeper to blame the queen they bought, blame the nuc, or the beekeeper's favorite, blame varroa mites. When you guess you cannot 'make a plan' to prevent the problem from happening year after year.

Here are the answers to my questions above. Remember that you are in a different environment and growing zone. You have a different climate. You have different bees. So, your answers might be different. If they are, and you have 80% survival rate over the winter, then I would like to hear your answer.

Here are my questions to the ones asked above.

1. **Do you wrap hives in the winter?**

   Yes we wrap. We started by using Wellington wraps for almost five years. Then we tried 1" insulation. Both were vented hives. Then we learned that a high wind can reverse the flow in a hive and the wind will come in the top, right into the brood. This led us to study condensing hives. Now we wrap with R5 cozies with a 6" tail flap on the bottom. We tape the cracks around the shim and cover the vent hole. Then we put R20-R30 on top, so the top of the hive does not reach dew point and cause water to drip on the hive. The R5 cozy allows the sides to reach dew point, so the bees have water to drink.

2. **Do you ventilate in winter?**

   After spending more than 5 months studying condensing hives and their use from California to Alaska, and in northern Europe, we closed the upper vent. There is a lot of evidence that supports the following:

   a) There is evidence that varroa mites cannot handle higher Co2 levels, but bees can.
   b) Dr Seeley suggests that trees do not have upper vent holes but exceed R30. This led us to a lecture by the creators of the Hive Hugger who discuss the important of keeping the top of the hive from reaching dew point.
   c) We have major wind problems in the spring. Finding that the wind can change direction and enter through the top entrance, right into the brood, made the upper entrance a hive killer in our area.
   d) Hive cozies have a problem with condensation according to a researcher who I was emailing with last fall. After asking the Facebook hivemind how they use cozies, I learned that 99% of beekeepers buy the side wrap, and not the top, and they vent. This will increase the dew point level on the sides, and decrease it on the top, making the condensation collect on the top. Dr Seeley suggests R30 on top. We could not accomplish this so we use R20-R24.
   e) Our own evidence demonstrates that upper vents, and not putting enough insulation on the hive tops, is lowering our wintering success rate.

3. **Do you split hives, use the Demaree method, or create nucs?**
   a) Yes, Yes, and Yes.
   b) We split hives and reverse them to prevent swarming early in the season. This is our 'quick fix.

c) If there are 2 boxes of brood then we will put a box in between with queen excluders. The bees will fill the middle box with honey. The box with the queen will have eggs in 5 days. The other box might have queen cells. If not, we will remove it and put a mated queen in it.
d) IF we want more brood then we will use a Demaree. We will find the queen, put her in the bottom box with 1 frame of brood. The rest of the brood goes into the top box. There is a box in the middle for honey. The queen will 'hyper' lay in the bottom box. The nurse bees will move down to care for these bees. The top box will be capped. In 3 weeks you will have a box full of nurse bees, a box full of brood, and you can repeat the process, or let the bees fill the top box with honey. This method increases honey production or making comb.
e) We will prevent swarming by removing capped. brood and putting frames of brood with their nurse bees in a box. Then we will do one of two things.
    i. If we come across a box that doesn't look strong, we will add frames of capped brood to increase bio diversity, increasing nurse bees and helping the queen start laying more.
    ii. We will make nucs and use them as mating nucs. Or we will put a matted queen in it. These nucs will be sold, or overwintered. If it is early enough in the year we may send it out to a production yard.
    iii. Why breed queens that do not swarm? Hives will swarm. That is how they 'breed'. Reproduction is a natural part of the cycle of life. Artificially breeding to reduce breeding is only 1 part of a triangle. When one thing is focused on, then other things will disappear. Swarming is not important enough for us to worry about. What we DO worry about is removing hives from our breeding program that swarm early, before the major flow ends.

4. Do you feed probiotics, hive alive, UltraBee, pollen patties?

a) We follow different feeding systems depending on the purpose of that yard.
b) Breeding hives
    i. 1:1.25 to 1:1.50 syrup with hive alive to facilitate building comb and brood building. March to July. Then 1:1 through the dearth. Then 1:2 for buildup.
    ii. Pollen patties with UltraBee March to July, and September to November.
    iii. Probiotics the last week of every month March to July, and Sept to November.
c) Queen Rearing hives

i. 1:1.25 to 1:1.50 syrup with hive alive to facilitate building comb and brood building. March to July. Then 1:1 through the dearth. Then 1:2 for buildup.
ii. Pollen patties with UltraBee March to July, and September to November.
iii. Frame sides of pollen in the cell builders, and added on top of pollen patties for the brood factories.
iv. Probiotics the last week of every month March to July, and Sept to November.

d) Production hives
i. 1:1.25 to 1:1.50 syrup with hive alive to facilitate building comb and brood building. March and the first of April to build up comb and brood. Syrup stops when they start to build up honey. If they are not heavy enough after the goldenrod flow we will feed.
ii. Pollen patties with UltraBee March to July, and September to November.
iii. Probiotics the last week of every month March to July, and Sept to November.

e) NOTE: the honey frames from the brood yards with the constant syrup fed are not harvested but used to overwinter bees.
f) We will watch the honey depletion through the dearth and the bee's temperament. If they are starving then we will harvest the honey, and feed sugar until the golden rod starts. We will feed a light sugar that promotes brood and comb building, but will not promote build up.

5. Do you feed syrup?

We feed all year round, like Randy Oliver. We feed thin syrup, 1:1.5 to stimulate comb creation (we need thousands of frames of comb a year.) and prevent them from storing honey. This syrup also mimics spring flow, so it helps boost brood as well.

We feed 1:1 and 1:2 when we want the bees to build up stores in the fall. But, we also hold back frames so that we can give the bees stores if they are light.

6. Do you overwinter in a double or single?

We used to overwinter in doubles but almost every year there were no bees and lots of honey around April. (We didn't feed pollen in March so some of these

hives might have died out because they couldn't build up brood early enough to keep their numbers high.)

Then John was at a bee lecture, and I was walking around the lobby looking at the bee equipment. There was another woman, and we started chatting. Her husband lived farther north than us. I asked a lot of questions, and she told me the most profound statement when it comes to beekeeping, 'It's all about the heat.' They do not rush to unwrap in the spring. They don't unwrap until Mid-May, or later depending on the weather. They wrap early in the fall.

Why? Because warmth stimulates the queen to lay. If the hives are warm, she will lay up to one month before the normal build up.

7. **Do you raise your own queens?**
    a) Why not? You cannot do any worse than many big commercial guys. Testing suggests that their bees are inbred, poorly mated, or closely mated.
    b) We lost several hives over the summer because we lost a queen. Then we started to hatch out cells. Now, we breed hundreds of queens for us.
    c) Learn about genetics first.
8. **What is your overwintering success rate?**
    a) In the first 5 years it was zero to 10%. In the next 3 years the ratio was under 50%, and in the bad year 2021 we lost all. After that we switched to condensing hives and we are over 75%
9. **Do you prevent swarms by creating nucs, splits, use the Demaree method, or let nature take its course?**
    a) See #3
    b) The main tactic to preventing swarms is being 'hands on' and keeping a close eye on your hive. We are in the brood factories weekly. We are watching cells, that is why we use Buckfast Queens. The bees are very tolerant of our handling, at least until after summer solstice. We also look for Queens whose brood rearing are not environmentally controlled.
10. **Do you kill Queen cells?**
    a) What is the purpose of destroying queen cells? There is a good chance the queen left as soon as the cell was capped, so now you have destroyed the hives' ability to survive.
    b) We do not kill cells. Early queens, and supersedure cells end up in our incubator. However, they will never make it into a breeding yard.
    c) These are cells, not grafts. If you do not need the queen then trade it with a friend.

11. Do you have a cell finisher, or incubator?

a) Incubators make it easy to raise queen cells, just remember that moving the cell too early will kill it, and if you leave it too late then it might hatch. If you are going to do this remember that your success rate will be low until you can recognize the difference between a new cell, and an older cell.

b) I have used cell finishers; I have also used cloak boards. I have had bees cover grafting frames with comb. I have had them fill out the cells on a bar. I have also had them remove the larva from the grafting bar and lay them in the drawn-out comb. This is one discipline where 'practice makes perfect.' You can only learn to get better by watching your mistakes.

12. Do you use fondant or candy board?

a) We prefer dry sugar and fondant. We have done candy board and it was not touched. Dry sugar will absorb condensation and be ready in February/March for the bees to eat.

13. Do you feed in late February or March?

a) Statistically hives that starve do so in late February or Early March. So we open our hives late February. We keep notes of all the hives. Our goal is to only open if needed. The light hives will be fed 1 – 2x by the end of April. The strong hives will not be opened again until the first week of may.

14. When do you unwrap your hive?

a) After talking to the wife of the commercial beekeeper the summer of 2024 who told me it is all about the heat, talking to agricorp, and learning about managing a brood factory, I have decided in 2025 we will unwrap later in May. In 2024 we unwrapped the end of April and the brood came to a complete stop for 10-14 days.

b) I have found no anecdotal evidence, or research that demonstrates any reason why hives should be unwrapped before the end of May.

15. What growing zone are you in?

a) Growing zone 7a. But based on the coldest temperature we have seen in the last 10 years we are in zone 7b. This gives us a good idea of whose management methods are something we can follow, borrow from, and learn from.

16. What is the first pollen of the year?

a) Based on listening to other beekeepers we will start feeding when the maple buds start to open. » London, Ontario, Pollen Monitoring Map - Pollinator Health Ontario - Accessible Viewer, in our area a good way to tell when the pollen will start is when they stop making maple syrup. This is Mid-March. This is when we start to feed.

b) Brood will build up. The #1 problem we face is a hard freeze that can mess things up. It will not be a problem starting spring 2026.

17. When do bees in your area start building up?

a) In 2025 hives were being split in March in the Kawarthas. We brought in packages in April and put them in brood boxes. We made our first splits 2 weeks later. Just an hour north of us, splits were not made until the second week of May.

b) We have already looked at the pollen and weather forecasts for next year. This will be an important year for us because we will be using the data from hive build up in our Dorchester yards, and compare it to the Aylmer yards. Then, our Lake Shore hives which have a different weather from the Lake Effect and this data will help us build our first indoor overwintering building.

c) We expect 3 different sets of data. Our new database (which is in development now) will be able to calculate dates, hive temperatures, etc.

18. Do you help weak hive by sharing brood from another hive, do you combine, or do you let the hive die?

a) We feel that there is no right answer.

i. Yes, you can transfer disease. To prevent this, you need a solid bio security SOP in place. Which, we do.

ii. Yes, you might be just prolonging a weak queen. Or maybe the queen ended up with a lack of nurse bees which slowed down her laying. Queens need a warm cell to lay, so if the nurse bees cannot warm a whole frame then a whole frame will not be used, the Queen will stop laying.

iii. Or maybe the queen has not been bred by enough Drones , or closely related Drones and the nurse bees are removing too many larva.

iv. Or, maybe it is an entirely untraceable problem.

b) Knowing the issues in a) we have a few criteria before ReQueening a hive.

i. What time of the year is it? If it is before June 1, we will add new brood to increase genetic diversity in the hive, increase the nurse bees, and we will probably set the box up to increase brood laying or put the remaining bees in a wrapped nuc.

ii. If it is July and August. We are going to use our best guess.

1. Why didn't the nurse bees supersede the queen?
2. Why didn't they kill her?
3. Are there any brood or eggs?
4. Is the queen injured?

iii. If it is later in the summer and we cannot find any problem with the hive, we are most likely to add 3 frames of capped brood. We will check three weeks later, and if the queen has come around then we will leave the hive. If we do not see her acting strong, or if the new bees have built started to replace her, then we will pinch her, and then wait 2 days and put a new mated queen in.

19. Do you buy queens or nucs? If so, do you buy local or imported?

a) We buy both with equal success. The problem is that you need to know what you are buying.
   i. A local breeder who inbreeds, does not flood with drones, or bring in new queens is unlikely to breed strong queens.
   ii. That said, if we have a choice between requeening a weak over wintered hive, or buying a new nuc, we will buy the queen. That is because queens are cheaper and if the queen is poorly bred then we have not lost as much money.
   iii. We are very careful where we import from. The only reason I will import is to bring in awesome genetics.

20. Do you prefer nucs or packages?

a) We have purchased both nucs and packages. Good nucs are great. But we also bought nucs where the bees were shaken into the nuc, with brood from different queens, and the queen was introduced the day before.
b) We have bought nucs that were packs so early the day before that 1/3 of the bees were dead on the bottom at 7am when we went to pick them up.
c) In some cases, nucs are the junk. Including one time when we bought 50 nucs and ended up with over 50 'black' frames that we quickly disposed of.
d) Packages can be no better. The quality of the package depends on what time of day they shake it. The package can be mostly older bees. The queen can be an older queen, or one that they do not want in their apiary.

Other Questions that I have answered.

21. Do you put your bees 4 to a pallet or on racks.

a) We tried this and have since abandoned it. In our area it offers no advantages. In one yard of 30 hives, 4 hives on one pallet developed chalk brood. This represents a 13% hive loss in that yard. The other pallets that were 10' away were unaffected. The chalk brood started in the hive that faced away from the sun.

b) This goes for our 'stands'. We use 12' stands that hold 5 hives. If a problem starts at one end, then it will move down the whole line. If we remove the middle hive, then we have (statistically) fewer losses. Putting each stand 10' away prevents the problem.
c) But we do not know what the problem is. Is it drift? Is it drone drift? Is it contamination from the beekeeper's tools hands, and sleeves?

22. Do you face your hives in all directions, or face all hives south? Do you put hives in the shade.

This is a hard one. We have done both with varying results. Some of our consistent results were:

a) Hives in the shade fail more often than hives in the sun.
b) Facing them in different directions doesn't seem to be a problem. We have had chalk brood in hives that are in the sun and facing north.
c) We found no benefits to facing hives in different directions. We did find that placing the hives 4 on a skid increased the spread of chalk brood. Why? Not sure. Maybe drift? Maybe contamination by our hands, tools, etc. while we were working between the hives.

23. What is your benchmark for success?

a) There are several benchmarks:
    i. Honey production
    ii. Overwintering success
    iii. Health and hygienic behavior
    iv. Starting up earlier in the spring
    v. Varroa resistance/tolerance
    vi. No swarming behavior
b) No beekeeper has one absolute benchmark. These are ours in order:
    i. Overwintering success
    ii. Health and hygienic behavior
    iii. Starting earlier in the spring.
    iv. Brood Production.
    v. Varroa resistance/tolerance
    vi. No swarming behavior
    vii. Honey production.
c) Now to defend my position.
    i. Over wintering success means that you are not buying bees in the spring, and that the bees can build up earlier in the spring. More bees

= more honey. So, the bees that overwinter increase the opportunity to produce more honey.

1. These bees also have a high tolerance for varroa, or at least they have learned how to manage.
2. These queens are most likely (hypothetically) the best-bred queens which increases their likelihood of having Alleles for hygienic behavior, and cleaning out disease.
3. A queen that overwinters did not swarm last June/July or abscond in the fall.

ii. Health and hygienic behavior. We feel that this goes hand in hand with a queen that overwinters. We never breed from a hive that is overrun with varroa or develops a disease. There are a few reasons that this is not our #1.

1. Removing brood can be caused by 3 different factors.
    a. 1. An over inbred queen for hygienic behavior will breed at least 20% with a hyper gene. After 3 generations you might have bees that remove perfectly healthy larva in their 'obsession' to clean the hive. Remember that 'hygienic behavior' is not a normal bee gene. We cannot develop new genes in our bees, we can just increase their ability to repurpose normal genes. There is never 100% success when we do this.
    b. Nurse bees will not feed larva that is too closely related to them. I would do a mite wash and open some cells to see if there are a lot of mites, before I called this hive hygienic.
    c. Hygienic behavior is a good thing, but an artificial behavior. That said, behavior is learned, not a genetic trait. What I am looking for is that hive with a very high mite count that is still around next spring.
    d. I am cautious to use hygienic behavior as a benchmark because no one can exactly tell us what hygienic behavior is. The only solid behavior I have found was from the leg biting bees developed by Purdue University.
    e. In Sweden they created hygienic bees that were 100% mite free. But, when those bees are sent out to other yards they perform poorly. This means that the behavior

may be 'learned' and passed on in the hive, or that it is a recessive that is very easily lost.

24. How do you manage Chalk Brood?

a) We have tried to leave a chalk brood and see what happens. Total failure. The 3 hives closest developed chalk brood and collapsed within 3 weeks.
b) Oxalic acid has anecdotal evidence that it helps with chalk brood. We vape constantly, which is why we rarely see chalk brood.
c) Our preferred method is to remove the frame if there are more than 5 cells effected, or the problem is spread across the frame and put it in a garbage bag. We freeze the frame, scrape it, and leave it in the sun for a week. If there are only 1 or 2 cells then we scrape about 3"

25. How often do you inspect the hives?

a) From Mid-April till Mid July we check hives every 2 weeks. We are looking for a strong queen, lots of bees, queenright, and disease free.

26. How do you test for mites.

a) We have always tested using alcohol washes. Now, only I do the washes as each person, and each method can result in different numbers. I follow the slosh method. ½ cup of bees in enough alcohol that the bees 'slosh' back and forth for 10 minutes. In our experience we have better results.
b) We tried the bottom sticky boards and didn't find consistent results.
c) Starting in 2025 we are going to sprinkle powdered sugar as a secondary treatment for brood boxes. Our theory is that 'every mite gone is good for the hive.'

27. If you breed queens do you also use drone flooding?

a) I had to search for information for almost a year to learn enough to feel confident with drone flooding. Currently we have 1 hive growing extra drone for 20 mating nucs. Also, we do not remove drone from any of our brood factories, or the hives in the breeding hives.

28. **Do you kill drones?**

a) We harvest drones and put them in plastic bags. Then we take them back to the house. The mites move fast so we cover the comb with powdered sugar and then open the drone comb. Using jeweler's glasses, we look for mites on the larva, and in the comb.
b) In 2025 we didn't find any varroa mites on drones until mid-June.

29. How Do we Treat for Varroa (Breeder yards)

a) We oxy every week to catch newly released mites.
b) When we inspect hives we use powdered sugar to prevent
c) Early spring we use formic, or apivar.

d) We will also use formic in August.
e) Note: The honey these hives collect is left with them to help them get through the dearth, or to help them overwinter.

30. How Do we treat for Varroa (Production yards)
    a) We treat with oxy through March, until the bees start to build up honey.
    b) In June we treat with formic pro.
    c) When we pull off honey in the dearth we treat drop to one or two brood boxes and treat with oxy.
    d) In the fall we let them fill boxes with golden rod honey, then around the last week of September we use oxy weekly because they will keep the honey.

Note:

These are our answers. This paper is not designed to tell you how to keep your bees, or the right way to keep your bees.

My goal is to share our beekeeping journey and hopefully help shave some time off our reader's learning curve.