STAHLMAN BEEKEEPING NOTES FOR 2025

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The End of the Summer Season / September is National Honey Month

This article is my second attempt to write about what we should be doing with our bees as we get ready for fall. Words have meaning but sometimes all I write is words, words, and more words.

I think hopefully I can add something to help each of you. But our world is now in the **A.I. era**. That is not artificial insemination (the first meaning of A.I. when I first was made aware of how we have reduced the English language to acronyms). But **A.I.** (Artificial Intelligence) is here and it is quickly replacing those of us that want to share our beekeeping knowledge. To prove that, just google (fall beekeeping). This is what I got!

I quote "*Fall beekeeping focuses on preparing colonies for winter by checking honey reserves, managing pest populations like Varroa mites, providing supplemental feeding if necessary, and setting up the hive to conserve heat and prevent intruders. Key tasks include ensuring adequate honey stores (at least 60 pounds in northern climates), reducing hive entrance size with a mouse guard, and potentially consolidating hives to reduce wasted energy on heating*." That is followed up with a YouTube video that explains how to prepare hives for winter.

The google answer then goes into how to prepare the hive on each of the items listed above. All this on that little device I carry around in my pocket called an iPhone. Maybe books and articles are a thing of the past like floppy disks.

I have a friend that mentioned that I could get a paper written by an A.I. program by just typing in two words. Wow! And I was watching Sunday Morning T.V and A.I. was being used to write music and do art. But beekeepers are still needed to manage colonies of bees and hive sensors, hive scales, and an internal camera can help some beekeepers carry out management techniques in real time. But the work requires a person to do the actual management of the hive.

I am often referred to as old fashioned. I love books and the information in them. I am amazed how honey bees have managed to acquire all the knowledge and skills they need to cope with the changing world they live in. Mother nature is not kind to those who fail to adapt. I am just

thinking that beekeepers fall into that situation as well. Get out your iPhone and google any two or three words you want.

We have what google doesn't have. Experience and the willingness to experiment. Maybe I am wrong on that. I just typed in more words (How do you stop your bees from dying?) Wow! YouTube gave me 10 videos to watch – All the way from 5 ways to STOP your bees from dying to 10 Ways to Save the Bees.

New beekeepers go thru a process of wanting to learn how to manage bees. Many expect to learn all there is to know about honeybees. It just doesn't work that way!

I have established my way of doing things. It would not work for all beekeepers. Beekeeping has been called an art! Those that have that (experience and skill) and feel confident about themselves become "beekeepers." But that doesn't mean they have solved all the issues bees are facing in today's world.

Let's face the fact that honey bee colonies die. I have listed several reasons for that.

- **Bees need food to survive!** No matter what you do, feed bees so they have winter stores. I find feeding bees now important. Some with bee foraging opportunities from goldenrod and aster might wait a bit longer but those crops are not certain. I have heard it said that a colony needs 60 pounds of honey to survive the winter. In my case, I like to keep a medium super full of capped honey above a deep brood chamber. Some will say that might be 40 pounds of honey but I do expect to see frames of capped honey in the deep brood chamber as well.
- **Bees in warmer regions need more food supplies than bees in colder climates.** When bees are in the winter cluster and the temperatures are cold outside the hive, bees in northern areas are not as active as the winter cluster that becomes more active as temperatures rise.
- **I have written about queen replacement –** If you don't know what the egg laying pattern of the queen in a hive is producing, all the management treatment to a colony of bees might be a waste if queens are not evaluated well before winter begins.
- **Many bee books recommend combining weak hives.** Two weak hives with poor queens do not make a stronger colony of bees or a better colony. Adding brood to a weak colony with a poor queen is a waste of time and energy – in fact, removing brood frames from a colony may result in the unfortunate result of making the stronger colony weaker – especially as new winter bees will be needed for it to make it through the winter.
- **If one decides not to treat for mites, there are several consequences one can expect;**
    - The colony will die due to the damage mites can do to a colony.
    - A surviving colony will most likely have some resistance to mites. In fact, some beekeepers feel that treating colonies allows weak colonies to live thus, passing bad genes on to the next generation. We have some very special beekeepers in the area that are using a system called Darwin Beekeeping. It is letting nature determine – the survival of only the strongest bee lines.
    - When a colony does not survive it is not a failure because bee equipment is not lost – just the bees. They can be replaced in the spring of the next year.
- **Even when a colony is treated for mites, a colony is at risk of failing for other reasons**;
    - Management techniques vary and mistakes are made. For example:
        - Moisture is a cause
        - Other pests may be present – wax moth and small hive beetles.
        - Failing queen.

- Lack of good timely inspections.
- Traditional methods such as wind breaks, wrapping hive bodies with tar paper or hive covers may help but quite frankly – do little good if the colony is weak.

Consider this – A survivor hive has a lot going for itself in the spring if it is strong with a good queen and has a large population of bees. It can be used to raise resistant queens and make splits. It will gather a good honey crop and draw foundation.

Going into winter, strong colonies produce a lot of excess heat. Weak colonies with small declining populations on the other hand cannot produce the heat necessary for colony survival.

A solution:
As long as a colony has a queen, some brood, and a fair population of bees, the following technique could possibly prevent them from dying.

This is a double screen board. Wire screening at the center of this board allows warm air to move up to a weak winter cluster when it is most needed during a cold winter season.

Thus, find a strong colony of bees and remove the top cover and inner cover and replace them with the double screen board as shown here. Place the weak colony above the double screen and you have a two-queen hive to pass through the winter. The heat generated by the strong colony will aid the weak colony.

A second option:

One might reduce a multi-story hive to a single deep brood box. This reduces the nesting area so heat is not lost. I have seen a number of single deep hives survive the winter in good shape as long as they have honey stores. I have even seen 5 frame nuc's make it through winter with some winter protection.

This is an example of a nucleus hive ready for winter. Note that nuc boxes are stacked one above the other. The top boxes hold the frames of honey allowing the bees to work upward during the winter season. This by the way is equal to two 10 frame Langstroth standard boxes that many beekeepers use for the winter season.

The advantage to this set-up is warm air rises vertically. Heat generated by a winter cluster does not move laterally. The air space is restricted to the natural upward movement of the cluster of bees during the winter season. This is much like the condition feral bees would find in a tree cavity. Note the strap about the nuc so it does not get blown over.