2026 Stahlman Bee Notes

Published By-Monthly by Dana Stahlman
Issue # 2 Vol. 8 Previous issues are available at www.ccbee.org

Let the new bee season begin! Here in North Carolina my bees have started raising brood. We have had a mild winter. I have been able to do a lot of reading and no matter what I do or see, old bee books are still interesting reading.

I am also sure that beekeepers of the past were more observant than present day beekeepers. They did not have so many distractions – TV, iPhone, central heat, and long drives to work.

When I was young our house had an iron potbelly stove to heat the entire house and it was my job to check the ashes and coal to make sure we had heat. Warmth is important for comfort and today, all I do is set the thermostat and hope my heating system doesn't break down.

You most likely have never heard of D.L. Adair who was a prudent beekeeper in the late 1870's. He lived when beekeepers were just waking up to science. Many things were changing in his beekeeping world. He points out that honeybees being managed had to be managed according to their rules. He starts his essay on *The Laboratory in the Bee-Hive* with this.

> "One drop of water hath no power; one spark of fire is not strong; but the gathering together of water is called seas, and the communion of many flames, do make both raging and invincible elements. One bee is no bee, but a multitude uniting their forces together, is very profitable, very comfortable, very terrible; profitable to their owners, comfortable to themselves. terrible to their enemies."

I like to think that he was passing some information on to me. We can not educate bees! If there is any educating to be had, it is up to the beekeeper to study and apply the knowledge and experience working with them.

At one time in our history, our government supported cooperative agricultural extension research in every state where land-grant universities published booklets on agricultural topics. Much of that support has ended. However, the teaching programs were needed to research and provide our generation with valuable information sharing what was learned about the workings of honeybees and research on management techniques that have been passed down to today. New ideas and investigations are still coming to us today with published articles in bee

magazines. The government funded bee programs are more or less, a shadow of what they were at one time. Thus, when I write these articles, I am using information based on previous testing (trial and error) efforts of what works and what doesn't. Most of it is also based on years of my own beekeeping experience. New beekeepers face the daunting tasks of learning the basic biology of the honey bee and the many management techniques used to take advantage of honeybee behavior. Thus, to start this season, I am going to count on many articles I found written by a variety of beekeepers (past and present).

Let me begin with **Agricultural Extension Special Bulletin No. 38** written in 1919 (over one hundred years ago). It is titled **Management of Bees -- Care of Bees in Spring** by Francis Jager located at the University Farm, St.Paul, Minnesota.

> Colonies are made strong by large production of brood and young bees. All spring management of bees must tend toward the largest possible production of brood. The beekeeper must constantly bear in mind that the colony will not raise more brood than the bees can take care of. The smaller the colony the less brood it will raise. **It therefor naturally follows that factors which decrease the size of the colony will also decrease the production of brood; that a loss of bees from the colony will be accompanied by a proportionate loss of brood, and ultimately the loss of the honey crop.**

Beekeeping today is much more difficult than it was in 1919. At that time, reasons given for causes of death and dwindling of a colony of bees were:

- Spring drifting
- Robbing
- Cold rainy weather and high winds
- Starvation
- Death due to loss of queen or other natural occurrence.
- Diseases

2026 beekeeping is similar but quite different because these following issues are unique stressors to today's honeybees.

•#1 killer of bees – *Varroa destructor* Pick up any bee magazine today (month after month) articles appear sharing research information and information on how to combat the destruction they cause. Depending on reports we can estimate that colony loss for this one pest is somewhere around 50 % of colonies that die. Quoting: Howland Blackiston and others "Doing nothing to protect your bees is one way to have no bees at all." If this strikes you as it can't happen to my bees, I can say that I have lost more hives of bees to this one stressor than any other stressor in my lifetime of keeping bees.

GMO's They had no clue what this was in 1919. Genetic Modified Organisms to prevent the damage to the leaves of this soybean plant. Plants are genetically being modified to kill insects that feed on them.

GMO, refers to any organism whose DNA has been modified using genetic engineering technology.

- Only a few types of GMO crops are grown in the United States, but some of these GMOs make up a large percentage of the crop grown (e.g., soybeans, corn, sugar beets, canola, and cotton).
- In 2020, GMO soybeans made up 94% of all soybeans planted, GMO cotton made up 96% of all cotton planted, and 92% of corn planted was GMO corn.
- In 2013, GMO canola made up 95% of canola planted while GMO sugar beets made up 99.9% of all sugar beets harvested.
- Most GMO plants are used to make ingredients that are then used in other food products. For example, cornstarch can be made with GMO corn and sugar can be made with GMO sugar beets.
- These figures come from www.fda.gov/food/agricultural-biotechnology/gmo-crops-animal-food.
- There was a time when soybean and cotton fields yielded great honey crops. Now some beekeepers will not even take their hives close to cotton or soybean fields.

Farm practices today are far different than just 50 years ago.

- Most of the small farms have been replaced by mega farms owned by corporations. Feed lots have replaced pasture fields in many locations. The crops grown today fall under the category of mono-culture. Thus, there is little diversity in the food available to honeybees. Farm families today are faced with the land being used in some other fashion as future generations make the decision of "making a living on the farm." Anyone living near a growing city can see the immediate impact of lost farm land.

Pesticide use in orchards, gardens, and crops will not cease as other countries mostly in Europe manage chemical contamination to their environment. This apple orchard owner is proud of his sprayer used to spray trees while just next-door bees are kept to pollinate the apple blossom's.

Land Use Some areas in the U.S. are expanding due to human population growth.

Those keeping honeybee colonies are facing honeybee losses not due to mites and viruses, but rather the over population of bee hives. Diseases are spread quickly in high bee populated areas. And one other thing, an area can only support a limited number of honeybee colonies. Robbing is one of the best examples I can give when it comes to placing a hive in your backyard. If other colonies are in the same area, they will be checking to see if they can visit and enter your hives. Once this process starts, it doesn't take long for a colony to be completely wiped out. Starvation is a bitter pill to swallow for a honeybee and if a near by colony is weak, it can be attacked and taken out (killed) in short order - robbed of its food supply.

This is a bee yard I worked in Georgia. Look at the bee population flying in the air- see those little dots. What would happen if this group of bees were near your bee's location? The competition for food with this number of colonies would be very high. If your hive or hives were anywhere near this commercial operation, I can easily say, you are not going to make much honey and you will be dealing with a number of other issues.

One other issue I want to touch upon, is you! A large number of colonies die because of mismanagement. As days pass this year, one should be checking colonies on a regular schedule. It is not enough to have bees; it is a point that needs to be made to anyone expecting to be successful keeping honeybees. The point – work your bees in a fashion that decreases problems that always come up during a bee season. There is no such thing as a swarm proof hive! One must constantly bear in mind that a colony without good health, one without a queen, a colony without anyone checking on those natural issues affecting bees; can within (9)

days reach a point where the colony is on a direct line to fail. Problems such as loss of a queen, wax moth signs, mites and small hive beetles in a hive or signs such as deformed wings and crawling bees at the hive entrance should not ever be tolerated. Some action is required if one is to earns the title **Keeper of the Bees**.