

Stahlman beekeeping notes for 2021

Issue # 13 April beekeeping issues

I am looking over a number of things I need to do for April management of my bees.

I lost a little more than 50% of my bees over this past winter. I was a confirmed no treatment type of beekeeper. In the winter of 2019-2020 I had 100% survival. My beekeeping methods were exactly the same for 2020-21 but the results floored me. I was hoping to make a number of splits – at least add a few hives and replace the dead-out. I will be able to make some splits but my approach this year has changed. Many of my friends have about the same results as I have had. The question is why so many losses this past winter. I did some mite checks and did not see high mite numbers. I can live with Varroa mites in my hives. The issue is can the bees live with what I consider low mite counts?

The hives that died had plenty of surplus food. One common factor I observed was small clusters and almost no bees in the dead-out hives. I began seeing this in November as I began reducing my hives into single brood chambers. I made a random mite check using the sugar roll test on each hive. By the way, I like to over winter in single deep hives – it reduces dead air space during the cold days of winter and the bees seem to do quite well – usually.

So here I am trying to develop a plan of attack – this is war!

My home bee yard has problems which I fully recognize. My next-door neighbor regularly sprays for mosquito's. My neighborhood is very densely populated with houses and people. The main honey flow is Tulip Popular trees and nothing comes in after that. Early spring nectar and pollen from maple and other decorative trees is abundant.

But my bees have a lot of competition for resources. Thus, I found an out-yard some 20 miles away that will support a number of hives without the bee pressure in my neighborhood.

My plan:

I am going to try to get the Tulip Popular honey flow in my backyard apiary. I am going to try to maintain four very strong hives and treatment for Varroa mites begins now. Once that honey flow is over, each of these four hives will be split – one of them will become a cell builder hive so I can raise queens in 25 – Five frames nuc's to be located in my out-yard (I call it the farm

yard). I have bought some special queen stock as my breeding stock this spring. There will be more explaining how I intend to use these nuc's in later articles.

I will describe the out-yard and how to find one in an up-coming article. So much bee management to share with you before I start writing about the out-yard.

Those of you who have a fixed location (Usually on property you own) are limited to the environmental conditions with-in two miles of your hives. Some locations are good and some are really bad.

Those moving bees to seek honey crops have advantages over fixed locations. Regardless of the state, some areas within a state can be counted on for getting good honey crops. I live in Raleigh but I would love to move my bees to the finger lake region of New York state.

I am looking at my own location in north Raleigh. There are many lakes in this region with tall pine trees. This area has little farming and property values are very high. We have a lot of park land used as recreational play and hiking areas. Most of these are heavily wooded with hiking paths near rivers and lakes. Several large powerline grids cross the area offering the opportunity for bees to forage. But the major problem occurs after trees have bloomed -- very little foraging opportunities are available in this neighborhood. I end up feeding sugar syrup to my bees which I am sure is not the healthiest way to keep bees.

I believe every one keeping bees should have an idea of how many hives your area will support.

Before you set up a hive as a new beekeeper, I think it is wise to set up a nectar station to count bees visiting your location. A nectar station could be a humming bird feeder. Many of my neighbors point out that "my bees" are bothering their bird feeders. But it is easy to bait a small bowl near a window of your house with a little bit of honey. Any bee activity will alert you to bees in your neighborhood. When one bee finds the honey, that one bee will share your location with other bees and bees visits will increase. This would also be a good way to determine if a site has a good possibility to catch a swarm.

I am often asked "what flowers should I plant for my bees"? There are many nectar and pollen flowers good for bees. The problem as I see it -- a small garden is nice but it will fail to produce the amount of pollen and nectar required for a hive of bees. A good strong hive of bees requires about 60 pounds of pollen to feed brood during a bee season. It is often said that a frame of brood requires a frame of nectar and pollen to feed the developing brood.

Thus, the following points need to be understood!

- Honeybees need food to survive!
- A strong hive requires more food than a weak hive!
- Honeybees require a near-by water supply!

One of the major problems with hive survival is:

Loss of bee habitat:



These are signs of the times. This is a development within 10 miles of the farm bee yard. I am not sure how long it is going to take before this growth reaches the farm but my guess is not much more than 10 to 20 years. I remember the growth around Columbus, Ohio north to Delaware, Ohio. I lived in that area for 25 years. In that time small towns became cities and the thirty-six registered bee yards I had in Franklin, Licking, Madison, and Fairfield Counties cannot be found today. New roads cross farm fields and all the old farm structures are gone.

In the five years I have spent in North Carolina, the same thing is happening. Many of the new developments are apartment building complexes going up. How they get so many buildings into a plot surprises me.



The number of new beekeepers has been growing at about 3% per year over the last 15 years. It is not unusual for a bee school to have over 50 students enrolled for a class.

I have read that bees can fly 5 miles from their hive to gather nectar. Experience has shown me that honey bees are good economist! They fly only as far as they have to. A long foraging

trip takes a lot of the bee's energy and a point is reached where they can go no further. I have had people pay me for my bees to pollinate their crops. They want the bees located within the crop. They fully understand that the bees choose which plants to pollinate. The plant with the highest sugar content in its nectar is the first choice for a honey bee. Thus, if dandelions are growing in an apple orchard – the bees will visit dandelions first and then decide to visit apple trees. Orchard growers understand they must get rid of the weeds if they want good pollination results. They want the bees in the orchard not in an outside location. A tree closer to a hive of bees is better pollinated than one some distance from the hive.

Some areas are not suitable to support more than a few hives of bees.

In populated urban areas -- bees have been known to bring in honey crops and survive from year to year. But when a new person adds beekeeping as a hobby, the amount of nectar and pollen available in the area two miles from their hive location is reduced. Add a few more hives and it reduces the share of nectar and pollen that each colony of bees will get.

If rain occurs during a honey flow it will have a greater impact on bees struggling to survive. Lawn services definitely have an impact on honey bees in the urban setting. There are times of the year when there is so much in bloom that almost any hive will thrive for a short time.

Food must be available at all times during the year to sustain a hive of bees. Any time a beekeeper takes honey from a hive, the beekeeper in effect puts stress on a hive to survive. Bees by design use up much of their stored nectar/honey and pollen rearing brood. Some strains of bees continue brood rearing as long as surplus nectar/honey is in the hive. If there is nothing to gather (pollen and nectar) bees will cluster on the front of a hive during the hot summer. They are not out working. They will be living on the surplus honey in the hive. Same goes during the winter season. In a good honey producing region, a colony of bees can collect over 200 pounds of surplus honey and still have enough to survive the winter.

Raising bees in the country is not always the answer to solve the problem of over stocking an area with bee hives.

There are some dead areas in the country – places with a lot of chemical applications. Crops such as soybeans require treatment for insect damage. Corn and wheat are wind pollinated crops and don't contribute nectar. Some indicate they do produce pollen but I consider a corn field as a dead area for honey bees.

GMO's (genetically modified organisms) are definitely affecting honey production in crops such as soybeans and cotton. According to the U.S. Department of Agriculture (USDA) GMO seeds are used to plant over 90% of all corn, cotton and soy beans grown in the United States. Although safe for human consumption, genetically modified plants produce toxins to resist pests (reducing the need for pesticides). Honey bees are insects that gather pollen and nectar from plants. We don't have to depend on the scientist from the grain companies telling us

that GMO's are beneficial, talk to beekeepers that have watch their bees on soy beans and cotton complain about how it effects their bees – Less honey gathered compared to the good old pre- GMO's days and high death rates for bees before winter sits in. If any of you know of any research on pollen gathered from GMO crops has been done, I would appreciate hearing from you.

Where are the good locations?

Look for those crops that produce flowers (even if for a short period of time) and seek to place hives near those crops. Blueberry, raspberry, and blackberry plants all need pollination. Mellon and pumpkin crops also need pollination. In North Carolina look for sourwood in western N.C. Later one may find goldenrod. Organic farms are ideal locations.

When I drive in the country, I am looking for fields of nectar and pollen producing plants. The best location for honey production is finding a farmer growing plants for seed. Sweet Clover and Crimson clover are at the top of my list.

Areas over run with weeds are usually choice sites. Wild flowers bloom longer and provide a succession of bloom throughout the summer season. Look for power lines, unfarmed fields, natural areas (usually public land), a livestock operation growing various crops to feed the livestock (clover, alfalfa, etc.), a landowner maintaining the land for turkey or deer habitat, and finally creek or river bottom land – just be sure to locate your hives above the high-water line. It is no fun to visit a bee yard and the hives have washed down stream.

If you are looking for bee yard locations – believe me – there are people who want bees but don't want to take care of them. Check the local bee club Facebook blogs. Another good source is to visit your local farm extension office. They can tell you who is growing what and locate farmers looking for your bees.

Upcoming articles:

Moving bees, Bee droppings, swarming, honey crops etc.

A hive that swarms usually will cost you a super of honey lost for the season. Think in terms of 40 to 60 pounds of honey.