



STAHLMAN

BEEKEEPING NOTES

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It is time to start thinking about honey flows and what you need to do to prepare for 2024.

To secure the maximum crop of honey you need to:

- **Have an idea for the time nectar plants will be in flower.**
- **Have strong bee populations at the start of the honey flow.**
- **Have beekeeping equipment on hand before the honey flow.**
- **Hope your bees will be located in an area with the opportunity for a good honey crop.**
- **Hope for good weather conditions when the honey flow begins.**

Every year is a bit different. I start the year as an optimist. I see an opportunity ahead. However, I have seen my optimism dashed with cold spells and rain. Some early honey crops such as Black Locust produce great crops of water white honey. But they like other short blooming season plants, bloom during a season when weather conditions are variable.



I have heard the term “Location, Location, Location” since I first became aware that bees needed to be moved from one place to another to gather a good honey crop. I grew up in Ohio. My grandfather was a commercial beekeeper and moving bees was part of doing business.

Those keeping bees near a field of henbit will not worry about bees finding enough forage.

Early spring brings on all kinds of flowering plants even in urban areas. Honey bees thrive in areas like this. All most all of the nectar gathered in early spring, goes into

feeding brood. Getting bees ready for a honey flow requires large bee populations.

Where honey bee hives are located makes a big difference in how much honey a hive can gather.

I am locked into managing my bees much differently than when I could move hives from place to place. I remember those commercial days when a single hive of bees could gather over 200 pounds of surplus honey.

But that is nothing according to the world records reported by Wikipedia free encyclopedia.

As indicated here.

Ormond R. Aebi (February 10, 1916 – July 19, 2004) was an American [beekeeper](#) who was reported to have set the world's record for [honey](#) obtained from a single hive in one year, 1974, when 404 pounds of [honey](#) were harvested, breaking an unofficial 80-year-old record of 303 pounds held by [A. I. Root](#).

Aebi held a [Guinness World Record](#) in quantity of honey produced from a hive of bees, but many others have surpassed that record. Single colonies of bees occasionally produce some spectacular crops. This is sometimes a combination a multiple queens in a hive ([see two-queen beekeeping management](#)), excellent weather conditions, or extraordinary good luck.

In 1979, Earl Emde of [Big River, Saskatchewan](#), had several colonies produce over six hundred pounds each,^[3] though Guinness was never employed to substantiate the production. Many other [beekeepers](#) in Canada, Australia, North Dakota, Florida, and the mid-west have seen similar results on rare occasions. However, a Mr. Rob Smith of Australia surely holds the world's most astounding result for an apiary. According to Bill Winner, Beekeeper Services Manager, Capilano Honey Company, "We can confirm the average production of 346 kilograms (762 lbs) per hive from 460 hives. (This is almost twice the Aebi claim to fame, and it is an average from hundreds of colonies, not just one hive's unique production.) The beekeeper's name was Bob Smith from Manjimup, Western Australia. The honey was Karri. The year was 1954." Mr. Winner adds: "This figure is confirmed by R. Manning with a reference to a journal highlighting a box titled *World Record in Honey* in 1954."

The material shown here was taken from a search of Wikipedia Free encyclopedia. If you are looking for other helpful beekeeping information, that information is available with a google search.

The bees in my backyard will be lucky to produce 60 pounds of surplus honey this season and I may end up having to feed them so they can survive thru the hot summer days into fall and winter. As I said, it is all determined by location.

I know many of you reading these notes do not live in an urban area. Your chances for a larger honey crop will depend on plants growing near your bees. There are some good spots here in North Carolina. I just don't live near them.

The following steps can be taken if you are serious about giving your bees a chance to gather the maxium amount of honey. This map is available on line [2023 USDA Plant Hardiness Zone Map](#) **The growing season has everything to do with what can be planted and when trees begin to bloom.**

- **The first step is work on colony strength.**
 - **Foraging bees are the important colony members. It begins with the first spring inspection – a time when the hive is beginning to build brood. Any queen issues such as poor brood patterns require immediate replacement of that queen.**
 - **The health of the hive is another factor that must be addressed as soon as possible. Mites reduce the life span of worker bees and affect their ability to gather nectar. Thus, early treatment is required well before the honey season arrives.**
 - **Feed hives to encourage brood production. It takes a large population of foraging bees to collect nectar and convert it to honey. In early spring maybe 1000 or more honeybees become foragers each day, but as the season advances that number becomes 2000 or more. In simple math, a hive producing only 1000 forager bees a day will only have a foraging force of 20,000 bees working the flowers providing**

nectar. I found the following figures on a search of how much honey can a honey bee gather? One honey bee will gather about 1/12 of a teaspoon of honey in its life time. The internet is full of statements such as 556 worker bees can make a pound of honey and 50,000 bees can produce between 60 and 100 pounds of honey. I have no idea of how accurate these numbers are.

- The second step is to make sure a management plan is in place.
 - It is important to know when the expected honey flow is beginning where your bees are located.
 - All equipment required such as honey supers must be available. Those beekeepers with drawn comb have a greater advantage over beekeepers with new frames and foundation.
 - Consider weather conditions.
 - Keep a journal with dates and actions taken. It will be useful in the future.
- The third step is to follow thru with the management plan and prepare for the honey harvest.
 - The follow thru is most likely the most difficult phase of getting honey for the hobby beekeeper.
 - Hive location is usually in a fixed location.
 - This limits the foraging opportunities to fixed times and the foraging area.
 - Competition from other beekeepers bees may present an issue in some areas.
 - Some nectar flows vary considerably from one year to the next.
 - Honeybees tend to work close to the hive and in a poor location may be required to fly some distance to gather nectar.
- Some facts to consider.
 - There are good locations and some poor locations. One good source to discover the foraging area around a colony of bees is to use Google Map. It will locate areas that may be possible foraging locations. On the other hand, it will also locate the human density use of land. Paved streets, house tops, and parking lots do not provide good foraging areas.
 - Bees will use the nectar and pollen resources early in the year to build up brood.
 - A hive located in a poor location will store honey for brood and colony needs. It then depends on finding enough nectar later in the year for winter survival. Taking honey from such a hive will require feeding during summer and feeding in the fall to provide needed winter stores.
- I was asked “How far do bees fly to get honey?” Of course, they fly to gather nectar, but this has always been a tricky question to answer. Quite a lot of research has been conducted. I heard the best answer from Dr. James Tew when he was asked a similar question at a bee meeting many years ago. He drew a comparison to a housewife and

a honey bee. His remark was something like “When a wife goes shopping, she is looking for the best bargain and needs for her family.”

I went to my bee library to try to find an answer to this question. I found more than I needed in The Hive and the Honey Bee published in 2018 by Dadant & Sons. Research shows clearly that the sugar content of floral nectarines determines where honey bees will go to get nectar.

There is no exact number of miles a honey bee will fly for nectar that I can find. One reported a honey bee will fly as far as 12 miles (20 kilometers). Others say up to 4 miles (6 kilometers). The issue I believe is important is not the miles a bee has to fly, but the amount of energy the bee uses to gather nectar. Traveling long distances requires energy and reduces the honey load to the point that flying that far is not worth the effort.

My experience has always been, bees gather nectar and pollen near to the hive. The closer the hive is to the nectar sources then more honey will be gathered.

Interesting facts about honey gathering:

- It takes a honey bee approximately 300 to 1,000 visits to flowers to gather a full load of nectar. (From The hive and the Honey bee page 298)
- Honey bees average around 10 foraging trips per day. (From The hive and the Honey bee page 298)
- The average load is around 40 milligrams (0.00141096 of an ounce) (From The hive and the Honey bee page 298)
- And 1/12 of a teaspoon of honey is produced in a foraging bees lifetime. (common number used in many internet posts)

Going to local bee meetings would be informative as well. We have a local beekeeper who keeps her bees on a hive scale. She reports that her scales during a honey flow can add 10 pounds of weight per day. I have seen bees fill and cap a medium super of honey within one week. Most would consider that super to be filled with 40 pounds of honey.

Finally, have extra honey supers available – always! Or get your extractor cleaned up and ready to go to work.

I will get into hive management for a honey flow next week. It is still swarming season. I spoke at a bee meeting in Lincoln County on Thursday night and was shown a picture of what is the largest swarm I have ever seen. I am not sure about records but it was huge.