

Sandusky River Valley Beekeepers Association



March 2021

srvba.ohiostatebeekeepers.org

Upcoming Events

Monthly Meeting—Monday, March 1, 2021

Virtual meeting using ZOOM

- When: March 1, 2021, 6:45pm Eastern Time (US and Canada)
- Please register in advance for the meeting. Members will receive an email for meeting registration.
- After registering for the meeting, you will receive a confirmation email containing information needed to join the meeting.
- Topic: Pollinator Plants
- Presenter: Jackie Kindred (SRVBA Director), & Richard Kindred (both Master Gardeners)



Message from the President

Hello SRVBA Members!

It's February 9th and a lot is going on in the world. The start of the second impeachment, and an arctic blast has settled in over Ohio. I've been hearing of some major losses with our bees. We also lost two great members of the club.

We lost Jim Tansey and Ken Kiser. These two members were very active in our club. They both had a great passion for the honeybee. They will be missed. Our thoughts, prayers and condolences go out to their families.

The Tansey family asked that donations be made to the SRVBA, in memory of Jim's name. As of this date, the club has received \$200.00 in donations. The Executive Officers and Directors have set this money aside to be used as an educational fund, to be used by young beekeepers under the age of 18, that have an interest in attending an SRVBA Beginning Bee class. Funding of these young beekeepers will be in memory of Jim Tansey.



Join Sandusky River Valley Beekeepers Association:

1. Fill out membership form

<http://srvba.ohiostatebeekeepers.org/>

2. Mail form to: SRVBA, c/o
Tami Wylie, 1000 CR 312,
Bellevue, OH 44811

Message from the President (continued)

In other news, the SRVBA Officers have been developing a PowerPoint presentation for the past year. The new presentation is now finished and will be used for future SRVBA Beginning Bee classes. The new presentation is owned by SRVBA.

We are having an in-person Beginning Bee class on Saturday April 10, 2021, from 8:00am until 5:00pm. The class will be held at the Wylie's Barn located at 1000 County Road 312, Bellevue. The class is limited to only 10 participants. Social distancing and a mask covering will be mandatory and worn by all. We are asking that only the instructor that will be teaching be present during their time slot to limit the numbers in the classroom.

We've made April 1, 2021, the cut-off date to register for the class. The cost of the class is \$50.00 per person. If there is an underaged individual wanting to attend the class, they need to be present with a parent. Registration forms can be downloaded and printed at our website www.srvba@ohiostatebeekeepers.org

If we have enough public interest in the class, we'll schedule a second class.

The cost of the class includes a box lunch, catered from a local eatery in Bellevue, with liquid refreshments, all handouts, class materials, and a one year membership to SRVBA and OSBA.



We had our February SRVBA meeting on February 1, 2021, via ZOOM. Ohio State Beekeepers Association (OSBA) President Peggy Garnes was our guest speaker. We had 20 club members log on for the presentation. Peggy Garnes had a great presentation, along with a nice PowerPoint about making **nucs and splits**. The topic was well received and some great questions were asked by many.

Message from the President (continued)



We will have our next meeting via Zoom on Monday, March 1, 2021, at 7:00 pm. SRVBA members and Master Gardeners Jackie and Richard Kindred will be our presenters for the evening. The topic is about flowers and other flowering plants that benefit bees and pollinators. I hope many of us will attend.

As a club, we keep all of our financials at the Fremont Federal Credit Union located in Clyde. Frank Weasner, Branch Manager of the credit union, does an audit (free of charge) on our checking account, usually twice a year. With Tami Wylie now taking over as Treasurer of SRVBA from Linda Miller, we had an audit again completed for the transfer of financials and everything came back perfect and in order. Something that we did obtain was a debit card for the SRVBA checking account. We thought it would be easier to use the debit card for purchases within the club for major gatherings that we have, instead of someone using their own money and needing to get reimbursed, and having to deal with receipts. There are only two people who have authority on this debit card, the Treasurer and President.

We are hoping to have a couple field days at the Wylie's this summer. Everything will be held outside with social distancing in mind and proper Protective Personal Equipment (PPE) in place. Here, we can help some of the members with questions and concerns they may have in their own yard/s.

We would like to show how to make different types of splits, and show the different aspects of the hive; workers, drones, queen, eggs, different cells, capped brood and capped honey. Later in the year, we would like to have another field day and show the making of sugar boards, pollen patties, and fondant, food for the bees for winter preparation and discuss preparing your hives for winter, along with honey extraction.

We might not be able to gather inside for a club meeting like in the past, but I think if we stay smart by social distancing and wearing PPE, some outside activities might work well for us. All we can do is hope that things get better with time. Please don't give up on the club. We're trying to make things as interesting and safe as we can.

Stay Safe,

Tom Rathbun
SRVBA President.

Message from the President (continued)

IN THE HIVE

March and April will be the bees' most challenging 8 weeks. With warmer temperatures during the day, and cold temperatures at night, along with wind, rain, and possibly snow, the bees will be active in the hive moving and eating what food storage they have left from the winter cluster. It's important to check under the outer cover to see where your bees are. If bees are at the top, they are probably running low on food stores.

Don't attempt to do hive inspections unless the outside temperature is above 60°. and bees are flying. It is okay to take a quick look under the cover to see where the bees are located.



Tom Rathbun
SRVBA President

Check the weight of the hive. If you're able to lift the back of the hive easily, chances are the hive needs some type of food supplement. Consider making fondant patties, or using a sugar board to feed the colony. If you treated the hive for mites, and made it through the cold winter, it would be heartbreaking to lose them because of starvation in March or April.

Also, check behind the mouse guards for dead bees. Make sure the bees are able to leave the hive for cleansing flights. I usually leave my mouse guards on until May, when the night time temperature is well above freezing.

Hopefully, everyone has success overwintering their bees. If not, don't get discouraged trying to figure out what you might want to do differently next year. Losses happen to everyone. It takes time to figure out what needs to be done. Like I mentioned, "don't get discouraged." Don't be afraid to ask what others are doing. There are no top secrets in beekeeping.

Stay safe and enjoy the bees!

Tom Rathbun
SRVBA President.
419-603-1749

News Article

Changes for Sandusky County Apiaries

Beginning this year, Sandusky County beekeepers will have a dedicated resource that has not been available to Beekeepers for many years. Sandusky County recently hired an Apiarist to inspect beehives beginning with the 2021 season.

A member of Sandusky River Valley Beekeepers Association (SRVBA), Trent Balduff, was selected for the new Apiarist position. Trent lives in the Sandusky area and has been a member of SRVBA since 2017. Trent served as the Apiarist for Richland County during 2019.

Trent became interested in beekeeping several years ago when the President of the company where he worked shared an innovative concept for using waste water treatment for irrigation of vetiver grass. The proposed intention was to eventually utilize the nutrient rich water to grow flowering plants such as lavender. Trent, being an entrepreneur, realized the need for honey bee pollination of these flowering plants and got into beekeeping to help with the overall health and growth of the proposed plants. Trent became knowledgeable about beekeeping, began keeping beehives, and managing his own beekeeping business.

Trent has a passion for community development and working within inner-city opportunity zones to make better food more available. Trent founded the *Have a Hive* organization, which places beehives in urban locations, and collections of hives in urban *Hive Parks*. *Have a Hive* is partnered with two Cleveland-based organizations with the mission to help alleviate poverty and provide educational opportunities. One of the organizations manufacture indoor farming systems using shipping containers, and the other organization teaches veterans how to farm as a means of mental rehabilitation and occupational development.

Trent provides the public with knowledge about bees, the environment, and wholesome foods. Trent is also the owner of T's Bees, which provides pollination services and bee equipment.

Trent is excited for the opportunity to support Sandusky County beekeepers by providing important hive inspection services. When asked what local beekeepers can expect during bee yard inspections, Trent indicated he will be gentle and careful with the beehives. Trent checks for mite load, indications of wax moth, small hive beetles, Nosema, and other potential diseases. Trent normally checks every-other hive in the bee yard. Inspections should provide good information and offer suggestions and dialogue with area beekeepers.

Let's welcome Trent to this new position!



Notes From Stahlman Beekeeping

Dana Stahlman is a fourth generation beekeeper from Ohio, but currently resides in North Carolina. Dana is a certified Master Beekeeper through EAS (Eastern Apicultural Society) and former professional beekeeper, having experience in both migratory beekeeping and queen rearing. He was the founder of the Ohio Queen Project, has kept bees in Ohio and Georgia, and was awarded Ohio Beekeeper of the Year in 1997. Dana was also awarded the prestigious Ohio Beekeeper Lifetime Achievement Award. Dana is the author of "Beekeeping 101," a handbook for beginning beekeepers.

Tom Rathbun

The Stahlman Beekeeping Notes for the week of 2/21/2021 is about a topic that keeps coming up each year. Beekeepers should be building frames and hive equipment well before the bee season begins. It is so easy to pass on that now, but once bee season begins a lot of things are going on and honey bees are not going to wait on us to be ready for them.

Frames & foundation -- Getting orders in for equipment is very important. I have found that many items are not available now and are back ordered. It will get worse before it gets better. I have noted price increases in gasoline, lumber and this week an 8 cents per pound increase for sugar at my local big grocery retailer.

Three-pound package prices for this year can range from \$115.00 per package to \$140.00. I expect the cost of package bees to continue to climb. Large die-off's are being reported by commercial beekeepers and this affects the cost of packages, especially if you have not locked in your order. Five frame nuc's are being sold in our area for \$175.00 to over \$200.00 per nuc.

Foundation is an important topic: **I have included it again in this 2/21/2021 Beekeeping Notes, and have added two previous articles from 1-6-20 pdf and 1-13-20 pdf for additional comments.**

Several sources you can visit to learn more about beekeeping [Powerpoint Presentations – Ohio State Beekeepers Association](#)

[Cherokee Bee Club Monthly Meeting – Guest Speaker Dana Stahlman – October 15, 2020 Video – Cherokee Beekeepers Club](#) A powerpoint presentation on zoom about stress factors on honey bees.

Beekeeping Notes for 2/21/2021

Topic: Building Frames and Installing Foundation

Even with it being cold outside, beekeepers have work that can be done!

In my case, I am building frames and putting foundation into frames. I am in a unique position of having an air compressor to help put frames together fast. I am using two types of frames: those for plastic inserts (I like these for several reasons) and frames that need to be wired using natural beeswax foundation.

Commercial beekeepers have for the most part adapted plastic inserts and wood frames into their beekeeping operations. Let me explain - I have ordered four boxes of black plastic inserts for the 400 frames I am putting together for this bee season. I prefer black plastic.

Plastic foundation requires frames that allow the inserts to be slipped into the grooves in the top bar and bottom bar. No wiring of the frame is necessary. This allows one to put foundation into frames fast.

Notes From Stahlman Beekeeping (continued)

Advantages of plastic foundation inserts:

1. Less labor involved in putting foundation into frames.
2. Moth damage is reduced – foundation can be recycled simply by power washing it.
3. Eggs can be seen in cells much better if the foundation is black.
4. Plastic foundation is sold with a wax covering. Often a double coating. (One can buy plastic foundation that is not coated with wax.) Inexperienced beekeepers often find that bees refuse to build comb on it and thus, feel it is not good.
5. The bee keeper can add extra wax to the foundation using a common paint roller dipped in liquid wax. This can be done with new foundation or used foundation.
6. During the extraction process, plastic foundation holds up much better than natural wax. (See comments when I discuss natural beeswax foundation).

Disadvantages of plastic foundation inserts:

1. It adds weight to hives vs. natural wax foundation.
2. One must understand how to use it in a hive so the bees draw it out correctly.
3. It does cut down on the number of drone cells in a hive! (See a later article about why drones are needed in a healthy hive.)
4. If steam heat is used to clean the foundation, the heat will distort the plastic.

Advantages of natural beeswax foundation:

1. First, bees will work it before they work plastic.
2. Beeswax foundation is available in several thicknesses (thin, cut comb, medium brood, and wired).
3. Beeswax can be recovered using simple devices such as a solar wax melter.
4. Starting a new hive with natural wax foundation avoids the many problems encountered by new beekeepers – especially comb built on the face of plastic foundation.

Disadvantages of natural beeswax foundation:

1. Takes more time to install wax foundation in frames.
2. Little errors can add up to big problems.
3. Wax foundation is brittle to work with in cold temperatures.
4. Wax moth damage (a topic I will discuss in later issues).

The information listed below applies only to those who will build frames and then put foundation in them. There are other methods used to get bees to build comb. An example is the top bar hive in which a strip of wax (called a starter strip) is placed in a top bar. I might mention that starter strips can be used in any hive frame, but the comb is often not uniform and can fall out of a frame during the manipulation of a frame during examination.

Notes From Stahlman Beekeeping (continued)

This is a picture essay on various ways to install foundation into frames.

Before I begin with the photos, let me point out that honey bees have some rules about building wax. If the beekeeper violates the principle of the "Bee Space Rule" the consequences will result in burr comb and comb constructed in spaces between frames.

One mistake is using only 9- frames of new foundation in a 10- frame hive. The picture shown below shows what happens to plastic foundation spaced too far apart in a hive. This hive clearly shows that the bees preferred to build the new comb from the front edge of the top bar rather than on the foundation in the frame. It happens to frames with natural comb as well. See the 2nd photo.



It is common practice for those beekeepers that have drawn comb frames to use 9- frames in a 10- frame hive. Bee space between drawn comb in a 9 - frame hive is not as wide as the picture shown above and thus to fill the space the bees will add to the depth of a cells on the frame and make it easier for beekeepers to uncap stored honey in those frames.

Commercial beekeepers use ten frame mediums with as few as 8-frames for honey production. They get as much honey from those 8 frames as they would from 10 frames. Uncapping equipment used by commercial honey producers is far different from what I use now. I am now all hands-on-deck and handle each frame individually when taking a hot knife to remove the cap-pings.

I want to point out a few facts about frames. They differ from one manufacturer to another.

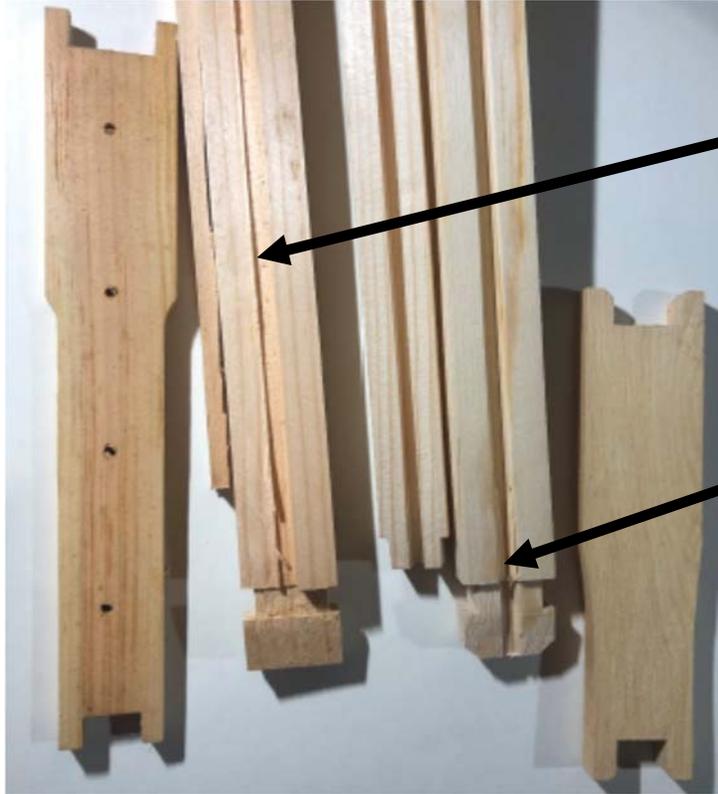
A frame designed for plastic foundation is not designed for natural wax foundation. The top bars, end bars, and bottom bars are cut to fit the desired foundation to be put into them.

First: Installing plastic foundation into a frame:

This can be done in a cool room and the beekeeper should have little concern about breaking the foundation. Plastic foundation is somewhat flexible but not brittle.

The end bars of frames used for plastic foundation are not drilled for wires. The plastic foundation is held in place by the groove in the top bar and bottom bar. No nailing or other support is required.

Notes From Stahlman Beekeeping (continued)



I am sharing two types of frames: one for wax foundation and one for plastic.

If you are using plastic foundation, you do not want the top bar to have the cleat/wedge, as the top bar in the photo on the left shows. The wedge is removed from the top bar and nailed back in place to support natural wax foundation.

To the right are the frames for plastic foundation. They may look alike but they are very different.

The top bar has a deep groove cut into the top bar to slip the top edge of plastic foundation into and the bottom bar likewise will hold the bottom of the plastic foundation. The proper fit and cut into these frame parts is important. Note the end bar for plastic foundation has no holes cut for wiring the frame.

This is a sheet of black plastic foundation being waxed. I consider this important to get the bees to draw the plastic foundation. Plastic foundation that is double waxed can be purchased for far less than the labor and cost to wax your own. If the bees mess up a frame of plastic foundation, the beekeeper can easily snap the foundation out of its frame, scrape all wax comb from the surface, and pressure wash the foundation, and apply new wax to its surface. **THAT CAN NOT BE DONE WITH NATURAL WAX IN A FRAME!**



Notes From Stahlman Beekeeping (continued)

Fitting plastic foundation into the proper frame is a snap as well.



There are no supporting wires required and a sheet is simply dropped into either the top or bottom slot and pressed into the opening until the sheet snaps into the opposite slot. It may take all of two minutes but often is much faster.

Bees will work plastic foundation just like they do natural beeswax. The trick is simply use 10 frames with wax coated plastic foundation in a new hive. I normally place a new frame of plastic foundation between two frames of drawn comb. Bees will draw the new comb on the plastic foundation like this (see below):



New foundation needs to be put into a hive early in the season. A beekeeper can stimulate wax glands of the honey bee, to build wax foundation, by feeding sugar syrup. The reason it is best to put new foundation on early in the season is [that is when plants are in bloom and when honey flows are common].

Queens will begin laying eggs in the new comb as the bees begin to build cells. In a new hive, the bees will begin on a few frames and expand the nest. It takes a lot of bees

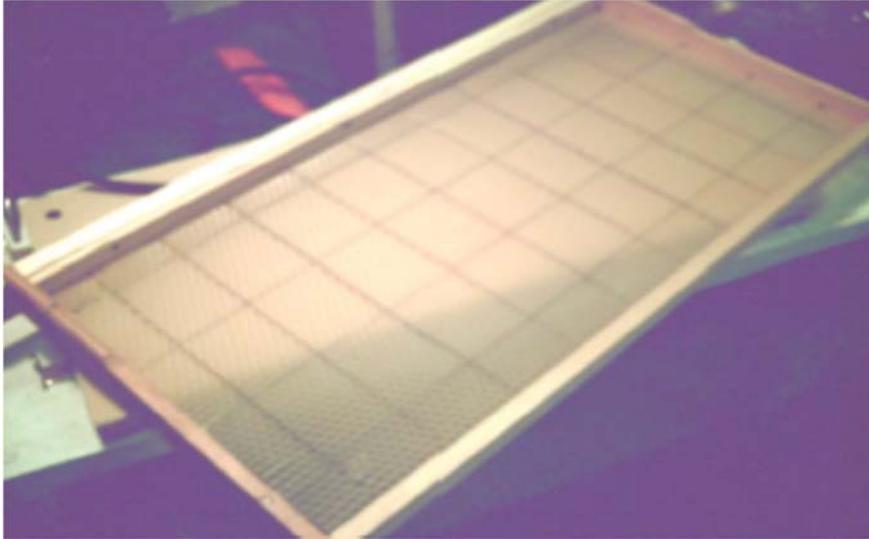
and resources for a hive to draw comb in two deep boxes if the honey flow ends in mid-summer. Any box of new frames with foundation added after the honey flow will not be drawn out by bees. If one is looking for a honey crop, it is best to have frames of drawn comb in honey supers. (Later issues will discuss the ebb and flow of honey crops.)

Notes From Stahlman Beekeeping (continued)

Installing new 100% beeswax in frames takes time!

Frames support comb within the frame.

This is a sheet of new beeswax foundation installed into a frame



There are several steps needed before a sheet of wax foundation is firmly installed in a frame.

After frames are built, the beekeeper will need to support the wax in the frame.

From my experience mentoring new beekeepers, this is a step missed by many bee schools.

Learning to build frames and install foundation is one of the basic jobs to make sure that bees get off to a good start.



This picture shows a wiring board. Bee catalogs may refer to it as a form board.

Frame wire is an additional expense if one is using wax foundation. However, many beekeepers can speed up the process by using metal or plastic support pins.

(Personal note) I don't like the plastic or metal support pins. Wire secures the wax to avoid the warping of comb. Pins do not. Wiring a frame can help prevent blow-outs. I often extract deep and medium frames full of honey. An extractor works by centrifugal force. The weight of the honey being removed from frames by centrifugal force causes the comb in a frame to be thrown out of the frame. This is called a blow-out. Without wire supports, extracted frames are prone to blow-out! Extractors run at high speed can even cause comb to blow out of a wired frame.

Notes From Stahlman Beekeeping (continued)

Since I work with and mentor many new beekeepers, I recommend wax foundation for them. This may sound like a contradiction, but if done right once a frame of foundation is drawn correctly, the errors individuals make with plastic foundation well out-weigh the justification to buy wax foundation.



This is a frame with wax foundation. The frame is not cross wired, but the foundation does have wires.

Buying crimp wire foundation to be used in the brood chamber or medium honey super is a wise investment.

If one looks closely at the photo above, the wires can be seen.

In this case cross wiring would add additional support as will support pins.

Just remember, the investment in equipment and building frames correctly is **[A long term investment]**! The bees may need to be replaced from time to time but the equipment has value if it is maintained and correctly assembled.

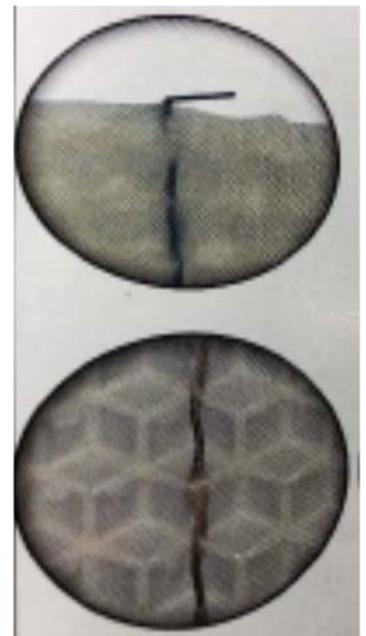
Experienced beekeepers know that **not having** the right equipment available at the worst possible moment is exasperating. Every colony ready to expand into a new hive chamber must have frames and boxes ready. This occurs when honey flows are going full blast, when colonies are going to be split, or a beekeeper suddenly finds a swarm needing a new home.

There is another subject related to building frames and choosing foundation.

Comb honey production and the frames, devices, and foundation used to produce comb honey.

I have had some experience in this area but buyers today are satisfied with chunk honey which can be cut from a honey frame, placed in a jar filled with honey and sold as such.

There is an art involved in producing real comb honey! If you are interested in that area, I refer you to books written by C. C. Miller and Carl E. Killion.



Notes From Stahlman Beekeeping (continued)

Beekeeping Notes for 1/13/2020

Topic: Foundation

Subtopic: Tid-Bit Information – taking a test or gaining new knowledge

Wow, Monday comes around pretty fast around here. This morning the bees were flying and bringing in a lot of pollen – two colors. Judi and I drove around the neighborhood and saw some flowering cherry trees in bloom. Frogs or toads are out hopping all over the roads. Bees are starting to raise a lot of brood. This indicates an early swarming season, even if it gets colder for a few weeks in February. The birds were chirping away like spring is here.

In the early years of beekeeping, frames did not have foundation to put into them. The beekeeper started with a strip of wood attached to the top bar cut into a triangle to help the bees build a straight comb within the frame.

Shown here is an early illustration of the Langstroth hive and a frame.

Note the very thin top bar and the support for a triangular beveled frame for the bees to attach comb to. I might point out that Langstroth did not claim to have discovered the frame.

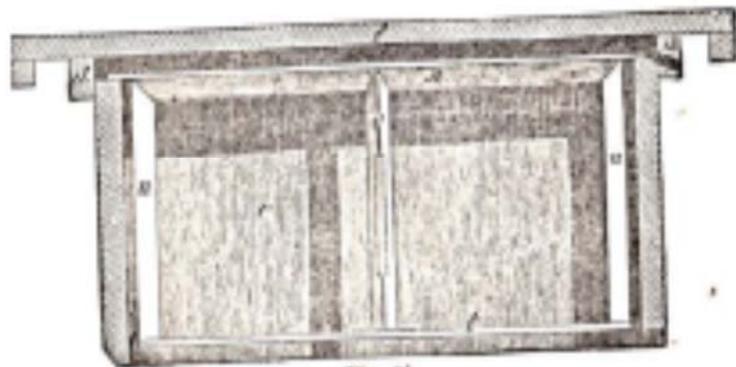
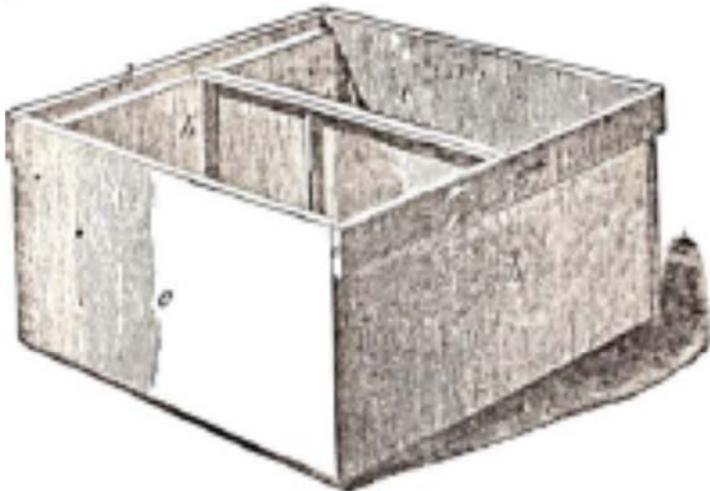


Fig. 14.

ORIGINAL LANGSTROTH HIVE.

b, b, front and rear of hive; c, d, pieces forming the rabbets for the frames to rest upon; e, e, sides of hive; f, movable cover; a, a, a, movable frame.

Bees naturally attach comb to edges and this design allowed the bees to build straight comb. Straight comb is a valuable asset for beekeepers.

Even today many new beekeepers find that the bees refuse to build comb the way the beekeeper desires them to do so. This is true especially with plastic frames and plastic foundation. This was also an issue with the amount of drone comb built in frames without foundation.

Many of those problems have been solved by using foundation for bees to build cells, either worker or drone in a frame. Many materials have been used to make foundation for frames in a bee hive.

Notes From Stahlman Beekeeping (continued)

A.I. Root was the first to manufacture comb foundation in the U.S. in 1876. He worked with a German (F. Weiss) to build a large roller-mill along with a skilled mechanic, (A. Washburne). The foundation became popular because all the cells were worker cells.

So much for history: First the question of plastic or beeswax foundation!

The choice between the two has pro and con answers.

First imagine you want to make your own foundation and you decide you will cut a sheet of smooth plastic and put it into a frame for the bees to draw comb. What the bees will do with that plastic is absolutely nothing. They will build a natural comb down from the frame edge – thus using the bee space to separate the comb from the plastic sheet. We often see this with plastic frames with plastic foundation. Rather than drawing out the wax cell impressions in the foundation in the frame, they will build comb from the top bar and not use the cell impressions supplied on the foundation.

Another issue is placement of frames. Even with frames with foundation, the bees may decide to use extra space between the frames to build comb. For example, a 10 frame hive body with 8 or 9 frames gives bees a lot of room to build free comb (often called burr comb) between frames. What happens if you forget to remove a package from the center of a hive after installing bees into a hive?



My thoughts after I checked out bee supply catalogs is that a new beekeeper may have some issues figuring out what to buy. Many catalogs are offering plastic foundation and frames which seem to be a good choice. I rather think that natural beeswax foundation is better for a new beekeeper because bees adapt to it much better than plastic. For more advanced beekeeping, plastic is a good choice if the beekeeper has learned how to get frames drawn without burr comb. The secret for plastic is to double wax the foundation and place frames with new foundation between frames of drawn comb.

Plastic is used almost universally by commercial beekeepers. It is tough! Honey frames can be run at a higher speed to remove almost all the honey from cells without damaging the comb. Wax moth damage can be repaired using a power washer to remove webbing and junk on the frame and the plastic can be re-waxed. One problem is the higher cost for each frame and the added weight plastic gives to a hive body. One cannot heat plastic frames without causing buckling to the plastic to remove disease (such as dipping plastic frames into a boiling water bath).

Notes From Stahlman Beekeeping (continued)

With all that said, I looked at my bee supply catalogs and looked up foundation. (Rite-Cells, Natural color, Max wax, unwired, standard waxed, quick draw, small cell foundation, Thin surplus foundation, Crimp wired, Cut comb foundation, Drone cell foundation, Beeswax foundation 4.9 & 5.1, Plasticell, Janolia Honeycomb bee Wax foundation, double waxed Pierco frames, and Ross Rounds. That is a mouth full of words for a new beekeeper!

Most bee supply businesses will handle few choices for the beekeeper to make. So let's look at a few of the choices one will face in deciding on a particular foundation.

Beeswax foundation:

Natural Beeswax foundation is available by sheets [the number of sheets per pound will depend on the size of the sheets and thickness of the wax]. The major suppliers for wax foundation are Mann Lake, The Kelley Beekeeping Company, and Dadant & Sons.

The beeswax choices are generally referred to as brood, medium brood, thin and comb honey thin wax foundation. Beeswax foundation can also be purchased with crimp wire for additional support for the comb built on it.

Pure Beeswax Foundation is subject to sagging during hot weather. Thus, it is wise for a beekeeper to buy wired foundation for either deep or medium frames. One of the major mistakes I have observed with new beekeepers is trying to secure wax foundation into deep frames with pins. If you want good straight comb in your frame when using bees wax foundation, you should cross-wire the foundation to the frame. I will cover how to do that in upcoming articles.

The Choices:

Deep frames foundation size (8 3/8 x 16 3/4) is sold in 10 sheets or a 25 lbs. a box. The number of sheets to a 25 lbs. box is approximately (175). Foundation can be bought as deep unwired brood foundation, but it definitely does require cross-wiring.

Medium frames foundation size (5 5/8 x 16 3/4) is sold as 10 sheets or 25 lbs. in a box. The number of sheets to a 25 lbs. box (275). Medium foundation sizes can be bought unwired or wired. Medium brood foundation also needs cross wiring to reinforce the comb in the frame. Cross-wiring is highly recommend for any frame to be extracted.

Medium frames for the production of a honey products which includes comb. Brood comb is too thick and not suitable for eating honey in the comb. Most thin cut comb or honey comb in section boxes or Ross Round require a wax thin enough to see newsprint behind the sheet of wax and it improves the appearance of the honey when light passes thru the comb.

What about small cell foundation?

There are a number of beekeepers concerned about the standard 5 worker cells to the inch. (5.4 mm size worker cells are made naturally by the bees). Some individuals are sold on the idea that small cell sizes such as 4.9 mm or 5.1 mm work in reducing Varroa Mite's ability to reproduce. Before you buy this foundation check out the research done by reliable scientist. Most bee suppliers selling the smaller cell sizes post statements saying the research is not yet confirmed and warn the buyer that it is up the beekeeper to make the decision to buy small cell foundation. I would like to hear from members of our club if they are finding small cell foundation giving a hive the protection from Varroa as claimed by some beekeepers? I personally have not seen it.

Notes From Stahlman Beekeeping (continued)

Next week I will be sharing thoughts on plastic frames and foundation. The major problem with wood frames (which have to be built and that takes time) and inserting wax foundation into frames (that takes time as well + some skill) is the amount of time and effort to do the job correctly. I have seen enough beekeepers who started a hive with foundation to understand the frustration when sheets fall out of frames or ends up slipping from the wedge top bar and hang in various positions within the hive body. The bees try to build comb but the guide that foundation gives them is no longer straight and evenly spaced. Bees do the best they can under those situations

Tid-Bit Information:

What should the distance be between the center lines of top bars to maintain the normal bee space between frames? From center line of one frame to the center line of a frame next to it, the distance should be _____ inches.

Who is credited with discovering the term bee space? _____

What is the size of a bee space? Either give the fraction of an inch generally regarded as a bee space or give detail on what a bee space is?

Who developed a roller mills to make selling wax foundation as a commercial product?

Pick the best answer from the choices given below:

Answer choices: The bees would:

- A. Build a bridge of wax over to the next frame.
- B. Build the starter strip straight down toward the bottom bar. The comb would most likely include mostly worker cells.
- C. Build the comb down toward the bottom bar but the comb would most likely be mostly drone cells.
- D. Ignore the starter strip and build comb as they do in a natural cavity attaching comb to anything that would support burr comb.

Every square inch of comb contains about _____ cells?

Super tough question:

Who was the first person to patent the first comb-foundation made in the United States?

- A. A.I. Root
- B. Charles Dadant
- C. Louis Hoffman
- D. Samuel Wagner

Notes From Stahlman Beekeeping (continued)

Beekeeping Notes for 1/6/2020

Topic: Some Information—Beeswax, Frames and Wax Foundation (Part I)

Subtopic: Tid-Bit Information – taking a test or gaining new knowledge

As I begin the second year of these Beekeeping Notes, I have to remind myself that although the year 2019 is in our rear mirror, we still need on occasion to look back. Catalogs should be arriving soon and many of us have already determined our style of beekeeping and what we want to do in the 2020.

I was asked a beekeeping question today, “Can I buy wax foundation that has not been exposed to chemicals and disease?”

Most likely not and if you have the bees build natural comb (i.e. from starter strips) thinking you can avoid contamination by chemicals, forget it. Chemical use is all around us. Those manufacturers who use bees wax in the production of foundation buy beeswax from many sources including commercial beekeepers, hobby beekeepers, and foreign suppliers of beeswax.

Old wax comb when melted still contain those chemicals. Heating the comb to process good clean bees wax may kill bacterial diseases but it does not remove the agricultural contamination and miss-use of chemicals in bee hives.

I checked this issue out on line and the information regarding the contamination of comb in bee hives was staggering. Eastern Kentucky University (2018) did research which was presented to the 2018 National Environmental Health Association Annual Education Conference held in Anaheim, California.

This report recommended the following statement:

One of the things that we can tell amateur beekeepers is that by changing out the actual comb, you can minimize the amount of pesticide present in the comb, Pinion said. If you use the same combs over and over, you can essentially have a buildup of pollutants. The pollutants that are there will persist.

Specifically, most of what I found indicates that testing of various samples of comb, honey cap-pings, recycled beeswax (beeswax sold in bulk solid blocks) contained the presence of xenobiotics which are agricultural pesticides. In most samples xenobiotics were found and I include some of the following: Herbicide atrazine, insecticides Chlorpyrifos-ethyl and thiadloprid; fungicides azoxystrobin and tebuconazole; and coumaphos, ethion and tauofluvalinate topped the list of about 30 chemicals that are long lasting and detectable. Honey tests reveal global contamination by bee-harming pesticides. Almost 200 samples of honey were analyzed for neonicotinoid insecticides and 75% contained the chemicals, with most contaminated with multiple types.

We live in the environment. It is what it is! I am just wondering if the build-up of chemicals in the drawn comb in our hives might answer the question: My bees just died or they just up and left. Why?

Notes From Stahlman Beekeeping (continued)

Now to the topic of frames and foundation.

I have before me four catalogs from last year. For anyone buying frames and foundation for frames, the choice is staggering.

First, we need to understand the terminology. Traditionally frames have been a standard length to fit inside a standard box. Kim Flottum writes in his book, Better Bee Keeping. the two things you already know are essential: standardizing the size of boxes you use, and the value of the boxes. Even though bee equipment manufactures sell standard size boxes, equipment will vary from manufacturer to manufacturer. For example the cut of the rabbet will determine if there is a bee space above the frames in a box or below the frames in a box. Hand holds will differ as well as corner joints.

A tid-bit of information: Do you know who is considered the designer of the modern bee hive?
[[Lorenzo. L. Langstroth](#)]

Do you know the standard length of a hive body? [19 -7/8 Inches]

Do you know the standard length of the top bar of a frame? [19 inches]

The standard hive was introduced in 1851 and a patent applied for in 1852. But various sizes of frames were in use thru the late 1800s. It took some time for this standard to be accepted by beekeepers.

One of the major reasons we have adopted the standard frame in todays beekeeping is the standard for extraction of honey from comb filled with honey. When the extractor was first discovered/invented by an Austrian Franz von Hrushka called a honey slinger in 1865, the production of comb honey in sections or comb was quickly replaced with liquid honey which could be sold in jars. Even today, I get asked by the general public and even some beekeepers, how do you eat comb honey?

Do you know who was considered the “First commercial manufacturer of bee supplies” in the new world? (The United States of America) The extractor was one of his products and he set the standard for frame size to fit into his extractor. The company he founded no longer manufactures bee supplies. [[A.I. Root](#)]

Shown below are a few of the many frame sizes commonly used in the 1880's.

Notes From Stahlman Beekeeping (continued)

Mann Lake Hive Body & Super Dimensions	
10 Frame	
9 1/8" 24.45 cm	9 1/8" x 16 1/2" x 19 1/8" 24.45 x 41.28 x 50.48 cm
7" 19.37 cm	7" x 16 1/2" x 19 1/8" 19.37 x 41.28 x 50.48 cm
6 3/8" 16.83 cm	6 3/8" x 16 1/2" x 19 1/8" 16.83 x 41.28 x 50.48 cm
5 1/2" 14.29 cm	5 1/2" x 16 1/2" x 19 1/8" 14.29 x 41.28 x 50.48 cm
8 Frame	
9 1/8" 24.45 cm	9 1/8" x 14" x 19 1/8" 24.45 x 35.56 x 50.48 cm
7" 19.37 cm	7" x 14" x 19 1/8" 19.37 x 35.56 x 50.48 cm
6 3/8" 16.83 cm	6 3/8" x 14" x 19 1/8" 16.83 x 35.56 x 50.48 cm
5 1/2" 14.29 cm	5 1/2" x 14" x 19 1/8" 14.29 x 35.56 x 50.48 cm

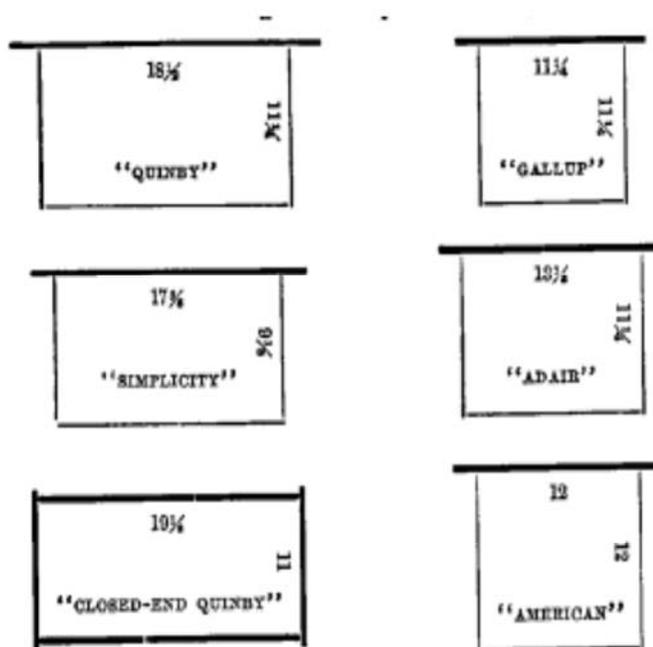


Fig. 10.

DIAGRAM OF PRINCIPAL FRAMES IN USE.

Figures given are outside dimensions in inches. Suspended frames have 3/4-inch supporting arms, or an equal prolongation of top bar.

(From The Honey Bee published by Chas. Dadant & Son, Hamilton, Hancock County, Illinois in 1889)

From the catalogs sent to me last year: Dadant, Kelleybees, Mann Lake, and (out of business) Brushy Mountain Bee Farm. These bee catalogs are great sources for illustrations to tell the story of equipment needed by a beekeeper!

Hive and Frame Dimensions

I liked this illustration because it lists the popular sizes most often sold in today's market place. These dimensions are universally sold by bee supply companies.

But when we start looking at frame construction. The issues become a bit more complicated!

The top bar of a frame is especially important because it will vary according to the foundation to be placed in it.

Information from various sources: Deep frames are generally used in the brood chamber of a hive but the medium size frame is becoming popular for being used in the brood chamber as well.

9 5/8 frames are called deep frames. They can be very heavy when filled with honey. One source indicates it can weigh up to 10 pounds when full of honey. These frames need wire to support that weight. Wired foundation needs to be cross wired to prevent the comb from sagging in hot weather and if used in an extractor, to prevent the drawn comb from being thrown out of the frame (a Blow Out). Pins to hold the wax foundation in a deep frame will not do a very good job of keeping comb straight. The foundation used in deep frames is usually called brood foundation.

Notes From Stahlman Beekeeping (continued)

6 3/8 frames can weigh up to 6 + pounds when full of honey. This the most popular size of what I refer to as a honey frame. Foundation used in medium frames will vary in weight. Brood foundation is needed the frames is to be used in the brood chamber or for extracted honey. Thin foundation is usually used for producing cut comb honey.

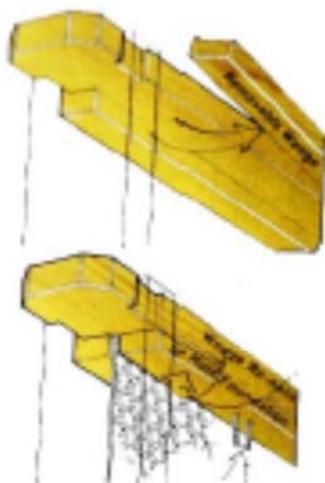
5 3/8 frames are usually used for honey supers. I have found the 5 3/8 frame sold with the choice of plastic foundation in the Kelley catalog. The others I have do not list it. It has lost favor mainly because beekeepers buy medium frames. A shallow frame as it is called can hold up to 5 pounds of honey. But anyone having trouble lifting heavy honey supers might well consider this size of super and frame.

Frames are very time consuming to build. It is one bee item that I always buy. I can build most other wooden items needed.

Construction of frames:

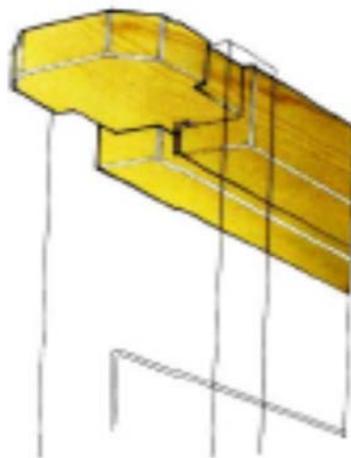
Other than the standard height, frames can vary from manufacturer to manufacturer. What follows is some common terms used for selecting frames:

Wedge Top Bar or Grooved Top Bar (Illustration from the Dadant Catalog)



—2 Frame Styles—
Wedge Top Bar

- 1) Wood wedge is removed from frame.
- 2) Foundation is placed in frame.
- 3) Wood wedge is held firmly against foundation and nailed or stapled in place.



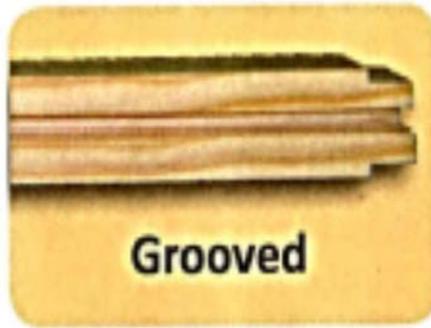
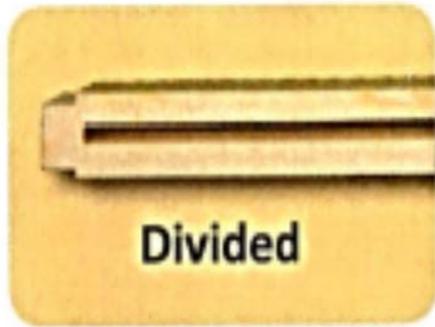
Grooved Top Bar

Foundation is placed in bottom-bar groove and top-bar groove. This frame works best with a rigid foundation such as Plasticell.

Notes From Stahlman Beekeeping (continued)

Bottom Bars – Solid, grooved or slotted

BOTTOM BARS



This illustration for bottom bars is from the Brushy Mountain catalog.

The grooved bottom bar is used for plastic foundation along with a grooved top bar. The plastic foundation just snaps into the grooves and makes putting foundation into frames quick and easy.

In Remembrance

James E. Tansey Obituary

January 22, 1949 - January 24, 2021

James E. Tansey Jr., 72, of Wakeman, died Sunday, January 24, 2021 at UH Parma Medical Center after a brief illness with COVID 19.

He was born January 22, 1949 in Elyria and had been a Wakeman resident for the past 47 years moving from Vermilion.

Jim worked for Sears as a Repair Tech for the past 52 years. He also served 46 years on the Wakeman Fire department as a firefighter, Captain and Chief. Jim was also an advanced EMT and worked for Citizens Ambulance and North Central EMS.

He was a member of St. Mary's Catholic Church, Wakeman, Wakeman Eagles, Friends of Wakeman Library, Sandusky River Valley Beekeepers Association, and the NOVFA (Northwest Ohio Volunteer Fire Association). Jim was active with the Bowling Green Fire School where he served as a director on the board and helped to set up the curriculum for the continuing education. He served as a councilman for Wakeman Village and brought Citizens Ambulance Service to Wakeman in the early 70's. He enjoyed beekeeping, gardening, and wine making. Jim will be remembered for his smile, large sense of humor, and his giving nature. He was always answering the call for someone in need.

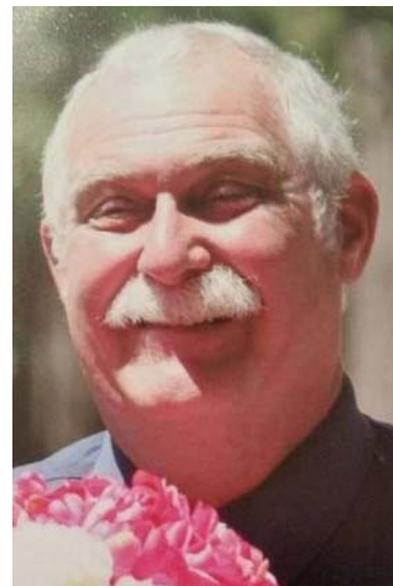
He is survived by his wife of 52 years, Mary (nee Soboslai) Tansey of Wakeman; daughters, Linette Tansey of Wakeman and Julie Tansey of Tiffin; step son, Michael (Lisa) Simon of Norwalk; sisters, Martha Foltz of Deshler and Teresa (Reid) Caldwell of Athens; brothers, Nelson (Dianne) Tansey of Kalamazoo, MI and Martin (Suzanne) Tansey of Wakeman; and many nieces and nephews.

He was preceded in death by his parents, James E.Sr. and Berneita (nee Ferber) Tansey and his brother-in-law, Bob Foltz.

The family will receive friends on Friday, Jan. 29, 2021 from 2-6 p.m. at the Riddle Funeral Home, 5345 South Street, Vermilion Ohio. Funeral services will be Saturday, Jan. 30, 2021 at 10:00 a.m. at the funeral home. Services will be live streamed at www.facebook.com/riddlefh. The Reverend Ron Brickner will officiate. Friends and family who want to come are welcome to attend, but due to Covid-19, we are asking that people be careful to maintain social distancing, wear masks, and refrain from embracing.

The family suggests memorial contributions to NOVFA, P.O. Box 54, Green Springs, OH 44836 or Sandusky River Valley Beekeepers Association, 4865 County Rd. 175, Clyde, OH 43410.

Courtesy of the Riddle Funeral Home, Vermilion, OH



In Remembrance

Kenneth Lee Kiser Obituary

November 26, 1934 - January 31, 2021

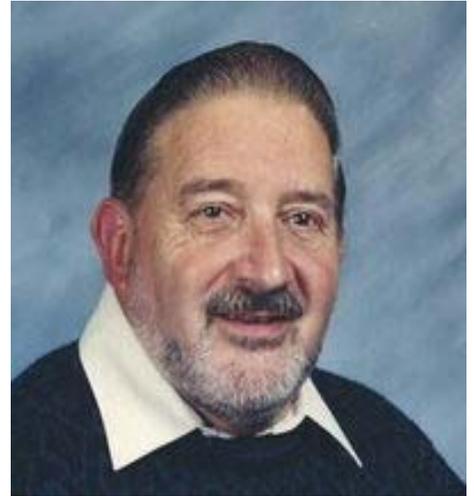
Kenneth Lee Kiser, “tell'em you heard it from KISER”, 86, of Fremont, passed away January 31, 2021 in Norwalk, OH. He was born November 26, 1934 in Fremont, the son of Howard Leroy and Vivian Mildred (Brenner) Kiser Pigott.

Ken was a 1952 graduate of Fremont Ross High and went on to enlist in the United States Marine Corp. Serving from Jan 20, 1956 through January 19, 1958 at Paris Island, SC, Camp Lejeune, NC, and Camp Upshur, VA. On January 26, 1957 he married Claudette (Kleckner) Kiser Kauble in Manassas, VA. They would later divorce. Previous employers were Young's Mobile Home Park and Schiets Motors. He worked as a machinist for Ludlow Composites retiring in 2018 after 55 years of service and was owner of Ken Kiser Sound & Communications since 1949. He was a member of Grace Lutheran Church, the Elks Lodge and Fremont Speedway Hall of Fame member. For nearly 3 decades he was seen with his faithful companions: Molly I, II, III.

Surviving are his children: Kimberley Kay Kiser of Alaska, Christopher Lee Kiser/Kathy Gibbs of Fremont, OH and Howard Michael Kiser/Leanna (Eaken) Kiser of Richlands, NC; significant other Donna Valentine of Fremont, OH; grandchildren: Jacob Thomas Jump/ Serina Tyrell of Alaska, Joshua James Kiser/Elizabeth (Goins) Kiser of Pikeville, NC; Melanie Nicole Kiser of Durham, NC; great-grandchildren Aurora Tyrell of Alaska, Taivon Agnew of Toledo, OH; sister Carol Benner of North Canton,

Visitation will take place on Friday, February 5, 2021 from 10:00A.M. until 12:30P.M. at Ole Zim's Wagon Shed, 1375 SR 590, Gibsonburg, OH. Funeral services will begin 12:30P.M. at Ole Zim's. Maureen Pump will officiate. Burial will follow at Greenlawn Memory Gardens with military graveside rights performed by the V.F.W. and American Legion. Memorial contributions may be made to Fremont Speedway Hall of Fame, c/o Randy Mapus 7503 Sunnydale, Castalia, OH 44824

Courtesy of Herman ~ Karlovetz Funeral Home & Crematory, Fremont, OH



Classifieds

Packages, Queens & Nucs – Tom Rathbun/Southridge Apiary

Package (3 lb) Honey Bees for Sale **\$119.00**

Extra Queens (each) **\$32.00**

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Pickup only.



Cherry City Honey Farms & Apiary – Tami & Gary Wylie

Bee Supplies and Equipment

Cherry City Honey stocks and sells new bee hive equipment. Due to our location in the Clyde-Bellevue area, it's approximately a one hour drive to the nearest bee equipment supply store. This drive is inconvenient, time consuming and expensive.

Also, online orders from distant suppliers often require purchase of larger quantities to obtain fair pricing and shipping/freight rates for new equipment are expensive.

We stock bee equipment you'll most likely need. Our bee hive boxes and equipment is of the highest quality and comes already assembled and ready for you to paint before use. The equipment is available for pick-up only.

We don't ship because the high shipping rates makes new bee equipment unreasonably costly. We can arrange for local delivery in the Bellevue-Clyde area. We accept cash or credit cards for payment.

Please consider us for your bee hive equipment needs. [2021 Price List](#)