



Illinois State Beekeepers Association Bulletin

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Letter from the President

Jim Belli

Thanks to all of our members who attended the ISBA Summer Meeting held in Gurnee, Illinois this past June. The meeting was co-sponsored by the Lake County Beekeepers Association. My sincere thanks go to Dave Bergman, LCBA President, Rich Herout, LCBA Vice President and his wife Lisa, Becky Jeffers, LCBA Treasurer, Sarah Westlund, LCBA Secretary, Ann Miller and Al Wagner for all the help they provided in making the meeting so successful. In addition, I must thank my good friend, Corky Schnadt, who spent many hours working with vendors and the Holiday Inn Convention Center staff in preparation of the Summer Meeting

At the Summer Meeting, I once again had the honor of presenting the ISBA's Pioneer Award. The presentation was made to Bernard and Helen DeVries in recognition for their lifetime contribution to beekeeping in Illinois. Bernard and Helen DeVries single handedly kept the Lake County Beekeepers Association viable during the dearth years before the boom we currently see in membership started. This presentation had a special meaning to me because the Lake County Beekeepers Association is my club. Needless to say, Helen and Bernard played an important role in my beekeeping life.

I hope to see all of you at the Illinois State Fair Honey Show this year. The Fair dates are August 9th through the 18th.

Finally, I would like to report on an event that I believe will have a long lasting positive effect on the

future of beekeeping. I was invited to attend the first of its kind Honey Bee Health Summit sponsored by Project Apis mellifera (PAM), the Honey Bee Advisory Council (HBAC), and the Monsanto Company. This gathering of academics, industry leaders, consultants and beekeepers was the brainchild of Jerry Hayes. Mike Mason and I represented the ISBA and presented Monsanto a Recognition Award for their commitment to research and development toward non-chemical, non-GM honeybee health solutions. I am proud of the ISBA Board of Directors who voted to make this presentation. I believe we sent the message that we, the beekeepers of Illinois, have a deep concern regarding these issues and we appreciate the efforts of one of our country's leading corporations in their research on the health and development of our bee populations. I left this meeting with a positive feeling regarding the possibility of seeing a breakthrough in honeybee health, which we all know is desperately needed. Monsanto has made a huge commitment in this time of limited funding for research. Monsanto's expertise in research and their willingness to cooperate with our leading academic institutions can, and I believe will, truly benefit our bee populations. As beekeepers, we all owe Jerry Hayes a debt of gratitude for holding the Honey Bee Health Summit.



BUZZ on over to The Morton Arboretum's Honey Bee Weekend

On September 7 & 8, The Morton Arboretum in Lisle will be holding its third annual Honey Bee Weekend. Weekend festivities include an Expo consisting of vendors with honey or honey-based products; a tour of the Arboretum's hives led by the Arboretum's beekeeper; informal drop-in lectures on bee-related products; beekeeping classes; a photography contest featuring photos of bees that will be conducted on the Arboretum's Facebook page; a honey-based picnic-style brunch with noted bee expert and author, May Berenbaum; a honey and mead dinner with Greg Fischer of *Wild Blossom Meadery and Winery*; and a **honey competition!** The

competition will include **five** show classes: 1) extracted honey light, 2) amber, 3) dark, 4) granulated (creamed) honey, and 5) comb honey in standard sections. There will also be a beeswax candle class. Judging will be by Maggie Wachter of Urbana, a certified honey judge.

On July 28, Maggie will conduct a workshop at the Arboretum on the proper way to prepare honey for competition. The workshop is free with Arboretum admission.

Rules for the honey competition as well as other information pertaining to Honey Bee Weekend can be found at www.mortonarb.org.

A Future Beekeeper's Dream in the Making

by Tim Lindley

Lonnie Langley is a beekeeper who lives south of Bluff City, IL and has 60-80 hives of honeybees. I am Tim Lindley, and I live south of Greenville, IL and have around 40 hives. Lonnie and I both have been beekeepers for a long time. We have been friends for several years, sharing beekeeping information with one another, and going to various beekeeping meetings together. We are members of the Illinois Queen Initiative, and Lonnie is the Southern Illinois Director.



We have started a club called the Tri-County Beekeepers Association, serving Bond, Fayette, and Montgomery counties in south central Illinois. We have members from all over, including Clinton and Madison counties as well. Our association is also affiliated with the Illinois State Beekeeping Association. We have monthly meetings, and try to keep the business part as short as possible so we can focus on beekeeping subjects in our bee talks and discussions.

This is a story about a dream coming true for a very unique young man. Daylin Ward was born with Spina Bifida, and he is confined to a wheelchair. He is 27 years old and lives in the country north east of Vandalia, IL. Lonnie met Daylin's step-dad Mike Morgason through Lonnie's son Chris, who are business partners. As is his custom when he meets a new family, Lonnie gives them a bottle of his own honey to break the ice. This sparked Daylin's interest, and he asked a lot of questions about how the bees make the honey and so forth.

From there, Lonnie gave Daylin some old beekeeping magazines and books about beekeeping. His mom told Lonnie, "Daylin would spread the books & magazines all over his bed and room, and read them from cover to cover." His parents also told me, "He would read the magazines until late at night, and tell

everyone in the family the next morning what he learned about bees the night before." Lonnie also invited Daylin to the beginner's beekeeping classes that were presented by the Tri-County Beekeepers Association last spring. Daylin told me later, "I was fascinated with the classes, and gained a lot of information about bees and beekeeping."

From there, Lonnie got the idea to get a top bar hive for Daylin. A top bar hive is long and has legs on it with space underneath, that would allow a person in a wheel chair to roll up to it and be able to work it. Lonnie contacted John Stretch from Hillsboro, IL, who was knowledgeable about top bar hives. John has a top bar hive of his own, and would know how to build one for Daylin.

Once the top bar hive was completed, on Saturday, June 8, 2013, Lonnie Langley, John Stretch, and myself all drove out to Daylin's house and presented him with the top bar hive. Lonnie had ordered a bee suit/veil for him to wear. It just so happened that my wife Anna and I had caught a wild swarm of bees a few days before, and the bees were just starting to draw out the foundation on the frames.

John showed Daylin how to put the hive together, and gave him some advice on how it works and how to work it. Lonnie plopped the bee suit down on Daylin's lap, and showed him how to put it on. After the hive was assembled, and he had his suit on, I helped Daylin shake the bees off of the frames from my nuc, into his new hive. Throughout the whole process, Daylin just



kept repeating the word "Awesome" as we did everything to get the hive set up. Daylin's mom (Wendy) was there also and she thought it was incredible that we were doing this for him.

After the bees were in the hive and starting to settle down, Daylin stayed out there for a long time just watching the bees with fascination. Daylin called Lonnie all excited a few days later telling him that the bees had already drawn out comb from the top bars about 2-3 inches. He must be paying close attention to the bees as all new beekeepers should!

My wife Anna and I went back to Daylin's home a

week later to visit him and his family, and to see how his bees were doing. We also presented Daylin with more beekeeping supplies donated from Dadant and Sons, Inc. and Walter T. Kelley Co., bee supply companies. Daylin was overjoyed to receive such an abundant blessing. Daylin showed me how the bees were doing; he manipulated the combs like a pro beekeeper!



He showed me the new comb the bees had just built, and he pointed out the brood, honey, and pollen to me like he already knew it all. I also gave him some tips on how to do a few things better, such as numbering the top bars so he can easily put the combs back in the

order of which they came out. As we were working the hive together, I noticed that his bees were very gentle, almost like they knew him well, and didn't mind him looking at their hive.

I think Daylin is pretty happy with his bees, and the Tri-County Beekeepers Associ-



ation will try to give him as much support as he needs to see that the hive grows, prospers, and produces honey for him! We will make him an honorary member of our club, and I will try to get him and a few other members to give a talk on top bar hives at one of our meetings in the near future. These series of events have changed my opinion on top bar hives. It might be a good idea for more beekeepers to build one and see how it does compared to their Langstroth hives.

Letter from the Editor...

I've tried for the first time to raise queens with a Cloake board and a cell punch. What an amazing opportunity to learn from my mistakes! If I share some, can you vicariously experience them, and avoid them for yourselves?

Lesson One: Use of a queen cage could have saved me from brushing a beautiful new golden queen that was laying like a champ into the grass – never to be seen again.

Lesson Two: If it's time to feed the splits, it might also be time to add entrance reducers. I lost four splits to robber bees! Technically, one was robbed out even after I added my queen excluder, which leads me to...

Lesson Three: A leaky feeder dripping onto the ground is a good way to start a robbing riot, and...

Lesson Four: Splits need lots and lots of bees. Then, they need some more bees.

I had heard these and other words of advice before, but hadn't yet dealt myself these hands. Now, can I learn vicariously from the advice of others? If I can come away from 2013 with that, then I can say I've learned something.

Yesterday, I saw the first laying pattern from a queen I

raised. Even if she is the only successful queen I've raised all year, she'll give me something to go on, just as learning from my errors does.

One other note this year – our big farm pond is being taken over by a yellow flower called Creeping Water Primrose – and the bees are working it. What will the honey taste like? Hopefully not yucky seaweed. But if it does, would a health food nut (like myself) pay high dollar for the added value? The logic is: "Honey is already healthy – but isn't it true that lots of things that taste yucky, are actually GREAT for your health? So how healthy must this seaweed-primrose honey be? Perhaps the Illinois answer to Manuka Honey?" Its this kind of thinking that leads to "learning from ones mistakes". Anyways, Manuka Honey is said to taste good. Crossing my fingers that Creeping Water Primrose will taste more like a flower and less like a weed.

Many thanks to our ISBA members who have emailed their written contributions! If you have an idea for an article, please contact me. It's fantastic, as always, to hear from you and a joy to present such a variety of topics.

Have a wonder summer, and a bountiful harvest, everyone. ~Eleanor Schumacher

Things to Know about Beeswax by Carolyn Gerberding

Beeswax is traditionally associated with candles. Throughout history, churches and the wealthy only burned beeswax candles because beeswax doesn't smoke or drip, and it burns longer.

The wax made by honeybees is a mixture mainly composed of esters of fatty acids (~74%), hydrocarbons (~20%), and propolis, pigments, and other substances. There are actually over 300 components in beeswax. 100 of these are unpredictable; but of these 100, only 41 have been identified. The pleasing odor of beeswax consists of 48 different components!

The worker bee hangs in a festoon when producing wax flakes and does not do anything else. Incoming nectar (or sugar syrup) acts as a trigger for the worker to start producing wax. On average, one pound of wax is produced for every ten pounds of honey made. In Medieval European times, beeswax was a common unit of trade.

Beeswax is the second hardest wax in the world. (The hardest is Carnauba wax.) Beeswax is used as protection from moisture for things such as metal, wood, and musical instruments i.e. gun stock and bagpipe reeds. Concrete countertops, wooden salad bowls & spoons, and butcher blocks are sealed with it. Wherever lubrication without an oily residue is desired, beeswax is used to reduce friction on things such as quilting thread, drawers, windows, and zippers. It is also found in makeup, medicines, polishes, art applications, and food processing to glaze fruit, candy, and seal cheese. It is used in endless engineering applications to cast, seal, or lubricate countless parts of devices.

The preferred colors of beeswax are canary yellow or wheat colored. New beeswax is usually light yellow in color, but over time it darkens to a golden yellow often from the oils found in some pollen. Beeswax turns brown from contact with bees and propolis. Repeated exposure to sunlight whitens beeswax – sort of a natural bleaching. In time, the molecular structure of beeswax rearranges and excretes a wax bloom on the surface of the wax.



Carolyn Gerberding's 2012 State Fair Entry
~Bee Gloves and Tools, with Potted Wax Roses

Some mistakenly think this is mold. Wax bloom does no harm and is actually preferred by some for its frosty appearance. It can be removed by lightly rubbing it with a cloth or warming the surface.

PROCESSING CAPPINGS

We are often asked exactly how to take wax cappings and turn them into quality candles. This is a challenge for the hobby beekeeper that doesn't have the volume of cappings to justify the purchase of expensive wax melting equipment. We created a presentation that we have presented to beekeeping groups on how to process wax cheaply.

If you are serious about working with wax, two items are worth the investment. One is an uncapping tank. It lets cappings drain adequately and allows you the space to sort wax by color. Keep light wax in a separate end from darker wax. There are a lot of homemade alternatives to the uncappings tank and we have tried a few, but none will give you the results without the mess. If the expense of an uncappings tank is daunting, consider a group or association purchase. It is one of those items that is only used a few days each year and can be shared.

The other essential piece of equipment is a solar wax melter. It can be purchased or built. Fred used the plans from Beekeeping in the Midwest by Elbert R. Jaycox to make ours. It has served us well for many years. Besides melting wax, Fred uses it to clean wax off of excluders, equipment, and frames. The best part is that it only needs sunshine to make it work.

Other equipment involves minimum cost – old pressure cooker, butter and cottage cheese cartons, old t-shirt for a filter, canning rings, wooden shish kabob sticks for stirring, lots of time and patience.

Processing wax is not difficult, but it does take time. In our "instant gratification" society, some will give up because processing cannot be completed in one session. Steps to take cappings to candles without a lot of expense:

- 1) Let cappings drain in the uncappings tank for at least 24 hours, stirring them a few times to maximize the amount of honey that drips out.

- 2) Take a container that is bigger than your cappings and line it with a thin piece of fabric that has been washed several times. I use old sheer curtains from the thrift store, nonwoven interfacing for sewing, or dust catcher fabric found on the bottom of upholstery. Wash your drained cappings in warm/hot water, washing one color of wax at a time. What seems like a lot of wax will reduce considerably as it is washed and the air and honey is removed.

- 3) Tie up the fabric with the wax in it and hang it to drip out the water. If it is not a sunny day, we store the drained



**Lauri Hill's Fair Entry
Lincolnland Beekeepers**

bag of wax in a container. If it is winter, storing it in the freezer prevents unwanted pests from finding a feast.

4) Place bag in the solar melter and let the sun process it. The bag is lying on the metal tray. The sun is heating everything through the glass and the melted wax leaks out of the bag and drips into the tub of water in the bottom of the melter. Any

unwanted residue in the wax is trapped in the fabric bag,

keeping the wax cleaner. *Once the bag is drained of wax, there is a floating island of clean wax in the water. Take this out to melt and filter one more time. *Some beekeepers use a panty hose leg to melt wax in the solar melter. It makes a great filter to capture all the slum gum. Just make sure you use old, well washed, light colored varieties as nylon dyes will transfer to the wax if they are new.

5) The next process involves liquefying the wax to pour into molds. **NEVER LEAVE WAX UNATTENDED WHILE IT IS MELTING** because of the potential fire hazard. In planning time management to pour molds with melted wax, compare it to fixing a meal in the crock pot. The time lapse is about the same.

6) Obtain a 5-8 quart pressure cooker from a thrift store. It doesn't have to work. You only want the heavy bottom to use as a base for melting wax. Save plastic butter tubs, cottage cheese cartons, etc. to use as melting pots. Place the pressure cooker on a heat source with 3-4 canning rings in the bottom. Set a plastic tub on the rings and put pieces of wax from the solar melter in the tub to fill it ¾ full. Pour water into the pressure cooker to partially immerse the tub, but not so much that it starts to float. **BE CAREFUL TO NOT GET ANY WATER IN THE PLASTIC TUB WITH THE WAX.** Turn on the heat and

get the water gently simmering. Occasionally stir the wax until it is all melted.

We use wooden shish kabob sticks as they are disposable and little wax is lost in coating them when stirring.

7) Meanwhile, donate an old, thin, clean t-shirt to your wax processing accumulation. Place a corner of the t-shirt over the top of a cottage cheese carton and secure it

with a heavy rubber band. Remove the tub of melted wax from the water bath; dry the outside of the tub so water droplets don't get into the wax. Carefully pour the wax through the t-shirt filter and into the cottage cheese carton. Avoid pouring the wax in the very bottom through the t-shirt as many impurities have sunk to the bottom. Wipe this sludge out with a paper towel to clean the tub for use again.

8) Remove the t-shirt and you have melted wax ready to pour into molds. Wax should be poured when it is about 10° above the melting temperature of 147°. Wax hotter than that will shrink too much causing the wax to crack as it shrinks. Wax cooler will cool too fast in the mold and



Bernadette Saad's First Place 2012 State Fair Entry

pieces might stick to the sides of the mold before it is filled, resulting in an uneven appearance.

9) Wait until the wax and mold are completely cooled before removing it from the mold. If using a plastic mold and the wax does not release completely, put it in the freezer for a while and it usually will pop out.

10) Fred and I have been blessed with a terrific mentor in Rich Ramsey who never once acted like our questions were ridiculous (and they have been numerous). The point here is to ask if you aren't sure. Beekeepers are known for their helpfulness. (We can't keep from helping because we are so passionate about bees.) In my opinion, the most complete book on wax is Beeswax by William Coggeshall & Roger A. Moore.

ENTERING WAX SCULPTURES at the Illinois State Fair

Several years ago, Fred began entering bee products at the Illinois State Fair. He did it primarily so he could better understand the standard in preparing prize winning products. Knowing what is needed to create top products makes us better beekeepers because we work harder to make all of our products as close to standard as possible.



**Jerry Wasson's Fair Entry
Lincolnland Beekeepers**

Packaged Bees...

Every spring here in the US, we flood the country with literally hundreds of thousands of packages of bees. Lately, a lot of people are claiming that may be the reason we are having so many issues. A couple of years back, a friend and fellow beekeeper recommended I go down and watch them shake bees. Since then, I have been lucky enough to be invited to help at several of the large bee yards. It is an experience that will humble the average beekeeper.

What is a package of bees? A package of bees is what we would refer to as an artificial swarm. Hives in the south are built up early and bees are quite literally shaken out of the hives into large funnels and then put in screened cages with new queens. Over the course of a few hours, this forced swarm accepts this new queen and they cluster around her until put into a new hive. While there in that cluster, the swarm goes into a change. From nurse bees and foragers, they are transformed into wax mode and swarm mode. And at least temporarily, they go into a state of low activity, or stasis. The cluster's core temp drops and metabolic activity slows. When dumped into a new hive, this means is they will normally accept it as a new home and at once start drawing out wax for the new queen to lay in, and to store food.

Now onto some of the details. Every year for the last 70 years or so, in the spring, suppliers in the south, mainly Georgia and California, have taken to the bee yards and made packages to be shipped north. I can't tell you the first year, but I can tell you, you used to order them from a



Sears and Roebucks catalog! Over the decades, this industry has grown from a few hundred packages to around 800,000 a year, nation wide. A quick breakdown shows about 350,000 each from Georgia and California, and the balance made up of Florida, Texas, and Mississippi. Generally speaking, east coast producers end up in the hands of retail consumers, and most of the west coast end up in commercial apiaries. There is some crossover on both coasts, but east coast makes up about 90% retail, and west coast is about 90% commercial.

There are several other differences between east coast and west coast package production, from how they shake bees to what types of queen cages they use. West coast

producers normally shake bees after almond pollination in the first two weeks of February. Producers shake out packages before moving their bees into honey production yards. West coast producers typically use a queen excluder and fume boards or smoke to get the bees to move into the supers. Those supers are then shaken into larger holding boxes which hold 15-20 lbs of bees. More bees than this, and heat buildup is a problem. Those bees are then usually weighed out into packages. A can of food and a queen are added. It is interesting to note that most west coast packages use a small Koehnen style queen cage.

Typically, west coast operations only shake the hives out 1 time. Their surplus of bees are a byproduct of good spring buildup, normally from almonds.

East coast is done a bit different for the most part. The hive is disassembled, the queen located, and the queen and some brood and nurse bees are placed back in the hive. All other frames and bees are shaken into a big funnel, usually directly into the shipping packages. Some are weighed, some are done more by volume of bees. Typical eastern operations do not use the secondary cage, or a queen excluder. Just skilled beekeepers, fast eyes, and a big funnel. East coast packages will typically contain what's ironically called the California 3 hole queen cage. Normally on the east side of the country, the hives are shaken 3 times in the course of the season. These guys produce bees to sell – from April through June.

It's important to also know that on both the east and west coast, most packages originate from a handful of large commercial outfits. There are about 6 major outfits in GA and 8 in CA selling at least 10,000 packages a year, or more. Selling packages is not for amateurs. The skills required to time production of queens and surplus of bees from hives takes a long time to develop. Add to that the logistics of shipping and handling an EXTREMELY time sensitive cargo and you have a challenge that can break the bank overnight.

Queen production is the next parallel step in packages. Each package needs a new mated and tested queen. No small undertaking when you are talking about 1000 packages a day, which is typical in the height of the season. Both east and west coast producers go about it in the same way. Thousands of queen mating boxes are made up long in advance with shaken bees and virgin queen cells. Typical queen mating yards will have 500-1000 2-3 frame hives, and a couple drone hives for breeding. The ripe queen cells are placed to hatch and 14-20 days later they come back and check the laying pattern in the mating nuc. Good queens are caged, sometimes with attendants, sometimes without. All queens are removed, either caged or killed. At the same time, hives are balanced with brood, or bees added and the next day a

...A Great Option, or the Cause of Our Problems by Charlie Linder

new queen cell is placed in the queenless nuc.

Typically, the packages are shaken in the morning while it's a bit cooler, and queens are caged in the afternoon when it's warmed up. You have to be careful opening the mating nucs – too early will chill the brood. Details like this are handled by real pros. They think of things we hobbyists never even consider.

For all package producers, heat is the killer. Bee swarms generate a lot of heat, and while dips into the 30's and 40's are not great on the bees, little harm comes from the cold. Spikes into 100 will kill a package of bees in minutes. Package producers are very careful to shake in the morning and quickly get those bees into the shade with fans blowing fresh air constantly. Watch closely for bees running the inside of the screen. Lots of bees running and fanning indicates a problem!

Normally, packages of bees are assembled with food and a queen and shipped the same day. Bees are sold well in advance and arrangements for pickup or shipping are already done. The majority of packages are picked up either by commercial beekeepers headed straight home, or resellers who have their customers primed for pickup dates. Typically the bees are shaken the morning of pickup and queens are caged literally an hour or two before they are put in packages. Ideally, the packages will be in new hives within 72 hours. After 6-7 days in the package, dead bees are starting to show in the box, something nobody wants. In this, weather plays a huge part. Last year late blooms in almonds meant west coast guys were a bit late, this year lots of cold weather killed off huge volumes of queen nucs – 3 times. It was definitely a frustrating year for both ends – producers and customers!

Lately, more beekeepers are asking, "Why packages?" Well, the main reason is timing. Packages can be produced 2-3 months earlier in GA than here in IL. For me, in Southern Illinois, I'm getting ready for apples in late March. My overwintered hives are just coming out of dormancy. I can truck them around, or I can have a huge swarm in a box, delivered, ready to start to work, with a fresh new queen. Were I to want to split my hives, I need to wait until mid May to have drones ready for mating and hives strong enough to split. That puts me way behind our typical good nectar flows. An 8 week jump is huge when it comes to the amount of bees in a hive. Normal southern beekeepers are starting to feed up for splits Jan 1,

while we are deep in cold.

The second is availability. Frankly put, there are not enough northern beekeepers to keep up with demand for colonies. With new hobbyists and high winter losses, splitting existing colonies is just not enough to keep up with demand. A lot of you experienced that this year trying to find bees! I know my phone rings constantly in April and May. If I would have split every hive I have into nucs I could have sold them all!



Overall, the package producers in the country strive to get good products to the customers. The amount of work and expense involved is huge and small slips can cost a fortune. A dead queen or package will quickly eat into profits, something that is already small given the amount of effort involved. A dead queen will eat the profits from 3 packages!

Over the years, the amount of work involved in developing the process and distribution system has been huge. I have been lucky enough to be allowed in several bigger operations every year. And every year I marvel at some of the little details these guys are following to ensure you get good products. From owners walking through and checking the fans in the storage areas, to watching over queen grafting from time to time. All of these are hands on operations, each and every one involved is first a beekeeper.

On both coasts, state inspectors watch over bee yards and check for problems. Things like foulbrood or large mite loads will shut down suppliers immediately. While here in IL we have a good inspection program for nucs, most states do not. Nucs in MO, for example, are not inspected. Healthy, happy bees are what's in a typical package, all ready to go to work. Just put them in a hive and stand back!



Waxing Philosophical ~ the Beekeeping Puzzle

"How to Bee Number One!"

Question: How can I cultivate Blue Ribbon Honey?

Answer #1: I think the best tasting honey comes from combs that were crushed and wax strained out versus extracted. More surface area exposed to air in the extracting process and honey oxidizes and some of the delicate volatile compounds are lost that affect flavor and "nose".

~ David Moechnig, East Peoria, IL ~2 votes

Answer #2: I certainly would not want to criticize those who enter honey shows. They show up equipped with polarized lights. They change lids just before the judges show up so any errant drip of honey will not be found. Moisture content can make or break an entry and everyone knows that water white is supreme. But, I can tell you those competitions do not call to me.

I do award my own "blue ribbons," but I do it with my eyes closed. My unscientific instruments are my tongue and nose. In my travels I always buy local honey. The variety is wonderful and I put my gustatory and olfactory instruments to work evaluating the bees' product. A blue ribbon? As with all honey connoisseurs, I have my favorites... there are many blue ribbons. Any elementary school student knows that no one leaves without an award and it is OK if everyone gets a blue ribbon.

So what is the real best? With great prejudice I consider that crop from my backyard the best. I give all my hives blue ribbons.

~Larry Krengle, Marengo, IL ~2 votes

Answer #3: Situate your bees close to a good nectar source. Use freshly drawn comb, remove honey as soon as it is capped. ~Beverly Tanner, Fairfield, IL ~3 votes

Answer #4: Consistent winners at state fair honey competitions usually don't like to talk much about their secrets. The rules regarding honey competition are well known – moisture content, taste and clarity are commonly judged characteristics. Although some honey characteristics are subjective and beyond our control – such as taste – we need to focus on those objective characteristics that we can control. Those that are most apparent include bottle cleanliness, fill consistency, honey clarity and, to some degree, moisture content. My experience is that most judging penalties are associated with moisture levels that are out of bounds, usually on

the high side. Buy and learn to use a properly calibrated honey refractometer. To some degree, you can "adjust" the moisture content of your honey through the use of a warm room, fans and a dehumidifier.

Also, be aware that just because your honey looks clear to the eye in a bottle held up to a light, that doesn't mean it's clear! Honey judges use an instrument called a polariscope to judge clarity. A small hair that is nearly invisible to the human eye looks like a garden hose when placed into a polariscope. A simple Google search for "honey polariscope" will show you examples. They're pretty simple to make. Perhaps your local club could build one for everyone's use.

You want a secret? Many successful honey competitors place their bottled honey into a warming box set to about 100 degrees for twenty-four hours prior to judging, thus dissolving microscopic wax particles easily spotted with a polariscope. Don't have a warming box? Loosen the lids a little and place your honey jars in the window sill, capturing the warmth of the sun.

Most importantly, have a good time entering your honey into competition. There's a little luck involved, so don't be too disappointed if you end up with less than blue. Learn from those that consistently win, and enjoy the camaraderie of your fellow competitors.

~ John Timmons, St. Louis, MO ~5 votes

Answer #5: Some of the little things are:

Have the right equipment including honey filters, polariscope, refractometer, toothpicks to prepare jars of honey.

Test honey for moisture - above 18% could disqualify it. It needs to be below 16% to avoid losing points, but many entries are between 16% and 18%. Point deductions are prorated based on the moisture score.

Warm your honey and filter it with the fine filters to remove everything but pollen. The honey polariscope shows an amazing amount of particles floating in the honey. Perfect honey starts in the apiary.

Use the smoker sparingly. What you use as a propellant matters. The cotton fiber smoker fuel can leave minuscule pieces of lint in the honey that the finer filters don't capture. Warming your honey also liquefies any crystals and makes the honey appear brighter. Honey that has started to crystallize, looks dull. Even if honey



looks clear to the eye, check it in the polariscope to make sure there is no crystallization.

Be careful to not over warm honey as heat darkens it and one class includes points for light color.

Use only glass jars as glass makes the honey sparkle. Just before placing jars on the shelf to show, polish them with a paper towel and glass cleaner, then handle them by the lid only - no fingerprints as that will show up in the polariscope.

New jars in the box aren't clean. One exhibitor lost first because the judge could see cardboard dust in the honey with the polariscope.

Wash jars and select ones that have no structural flaws; these are getting harder and harder to buy as the mold for the glass is so old that flawed is the standard. Either the queenline or classic honey jar styles are most often used.

Make sure no honey is on the inside lip of the jar and no honey on the inside of the lid. Most entrants take extra new lids and trade them out before placing them on the shelf.

No bubbles or foam on top (use toothpicks to get rid of bubbles; lay Saran directly on foam and peel it away like you would a banana; the foam will stick to the plastic, leaving a clear honey top).

Pour your honey well in advance so there are no air bubbles in the honey. To speed up the process of the air bubbles rising to the top, you can set the jarred honey in

a closed car that is in the sun!

Make sure all three jars are filled to the correct level and all are filled to the same level. The correct level is just full enough so that when the lid is on, there is no light or air showing - only honey. Having a gap of air near the top of the jar makes the customer feel like they are getting shorted product.

Flavor is a consideration and might be subjective with the judge, but entrants can identify a good flavor when pulling honey and keep the integrity of it by not blending it with other extractions. Part of the judge's strategy is to identify flaws which lose points and make the winners easier to select.

~Carolyn Gerberding, Rochester, IL ~6 votes

Answer #6: You buy your wife a dozen roses and take her to dinner. ~ Jim Belli, Wadsworth, IL ~3 votes

Answer #7: For liquid honey you can extract by crushing the comb by hand and draining in a strainer. That reduces the bubbles .

The secret of comb honey is getting the right colony that draws white wax and leaves an air bubble under the cappings. ~ Rich Ramsey, Rochester, IL ~3 votes

Next Issue's Question: What's the most efficient way to deal with drone laying colonies, or colonies with laying workers? - Alan Guttersohn, Breese, IL

The brood

Chamber

Come and see what all the buzz is about!



Human kind has lived around bees for thousands of years. Bees have helped us with necessities in life. I have already told you about Propolis but did you know that bees have given us so much more? In this article I will show more products of the hive. Honey can be used as subsequent for sugar . We also use wax often. We can make candles, lipstick, crayons, dental floss, sewing items, earplugs and even modeling wax. Beeswax

Products of the Hive by Astrid Sabo

candles not only smell good when you light them, but also last longer.

Did you know that the first ever crayons were beeswax? They were invented by Edwin Binney and his cousin C. Harold Smith. The colors were black, brown, blue, red, purple, orange, yellow, and green, and sold at a nickel a box.

Also don't forget that bees pollinate our vegetables and fruit. All these things are very important to us. What would happen if the honey bees disappeared? How would we be able to pollinate our crops? And how would we replace the products? And if we did, how well would they work? We need to understand that these insects, these bees, are vital to our survival.

Some information from "The Hive and the Honey bee."

<http://inventors.about.com/od/cstartinventions/a/crayons.htm>

This keeps our products high quality which helps keep the industry high. Whether you wish to compete at a fair or it's not your thing, learning the standards is important to improve your knowledge base and keep the product presentation high quality. We have a presentation we give to bee associations on Blue Ribbon Honey products and how to prepare them. Mr. Belli, and his wife Karen, also speak to groups about this. Ellen Nusbaum, one of the charter members of the Lincolnland Beekeepers, gave us an old, out of print bee book that included instructions on wax flower making. She said, "You need to make these." Her challenge led us to create a 100% beeswax bouquet to enter at the Fair in the Art Designs in Beeswax category. Since our first attempt, we have created several more. The only limits are our imaginations. After about two years, ISBA president, Jim Belli entered his first flower design which was a magnificent lotus flower on a piece of driftwood – all of 100% beeswax. Ever since then, we have had a friendly rivalry to outdo each other. While winning isn't that important to us, besting the ISBA president is kind of fun! The real benefit of our annual challenge however, is that more beekeepers are noticing and entering art designs in beeswax.

Last year's winning entry from Chris Saad of Cook-Dupage Beekeepers was made by his wife, Bernadette, and features a bee yard with unbelievable detail. Third place went to Jerry Wasson of Lincolnland Beekeepers for his incredible 100% beeswax hand holding a queen plucked from a brood frame.

Our entry was for our association display and was a clay pot of roses that also included a bee brush, hive tool, and bee gloves. Everything is 100% beeswax. The plant pot was made of stained wax that looked like terra cotta. Custom molds were made for the gloves, hive tool, and bee brush using a material called Rebound 25 from Smooth-on, Inc. The molds were then poured in beeswax.

Using this medium, anything can be cast for a mold. It can be purchased as a beginner's kit and comes with DVD instructions. Follow them exactly to get a perfect mold that can be used repeatedly. The wax flowers are made from paper-thin sheets of wax I make, then shape. It is extremely tedious work, but the results are spectacular. Separating wax by color when uncapping, gives more color variation in the design. Adding dye to wax is acceptable if it is appropriate to the design i.e. making leaves green.

Wax flowers aren't new. They have a long history in bridal head pieces. The orange blossom represents purity, chastity, and fruitfulness and was featured in wedding head ware in ancient China. When Queen Victoria had them in her veil in 1840, it became the standard. In northern climes where the actual blossom was not available, head pieces with orange blossoms were made of wax flowers. Wax head pieces from the 1870's to the 1950's can be purchased at antiques sales today – proof of the durability of beeswax sculpture.

From the first piece of burr comb Fred handed to me, I have been fascinated with all the color variations of beeswax. The creamy white of a new rose, the bright yellow of the canary, the golden orange of the goldfish, or the light taupe of wheat kernels all spur the imagination to want to create artwork as beautiful as the colors the bees made. In our "hurry up and get it done" culture, knowledge of how to work with beeswax is being discarded as too time consuming with little profit. Beeswax is probably the hive's most under-appreciated product. To know that the secretions of a tiny insect that lives only six weeks, can inspire so many uses, is truly proof that everything has a purpose in God's world.

Carolyn Gerberding ~a beekeeper's wife

A Good Hobby – If You Don't Mind Getting Stung by Colleen Valentine and Christine Smith

The best-tasting honey that had ever passed his lips propelled Bernard DeVries into a hobby that lasted for over 40 years.

"An older gentleman gave me a jar of honey. Oh boy, was it good!" Bernie said, remembering. He soon found a beekeeper in his American Legion Post (Antioch 748) who was downsizing and moving out of state, and figuring beekeeping was cheaper than golf, Bernie bought the man's equipment and was soon setting up in his back yard, ready to get started when spring finally came.

The first few years were very unproductive. He extracted no honey the first year, only 5 pounds the second, and 10 the third. "I learned to keep my nose out of the hive and let the bees do the work," Bernie said. Instead of opening the hive to check honey production, he learned to just take out a frame. If there was honey in it, he didn't bother the hive

anymore.

Bernie's best year was when he extracted 1,100 pounds from nine hives. Bernie's wife of 66 years, Helen, had no problem with his chosen hobby. "If it keeps him happy... It's a good hobby – if you don't mind getting stung!" Helen said.

Bernie's advice for new beekeepers is to "stay away from the medications (for the bees). The bees died just as fast when I used it." He pointed out that by not using medications on the bees, he didn't have to be concerned about whether the honey would be contaminated by it.

As for stings, the most he got stung at one time was 27 on his ankle – "and then I stopped counting!" Bernie said. He started wearing boots with the pant legs tucked in after that incident. He has never had a bad reaction to being stung, and he or Helen would just make up a baking soda and water paste to cool the area and remove the sting.

The Buzz About Town

2 LET IT BEE BEEKEEPERS ASSOCIATION April Morgano ~ Joliet, IL Phone: 815.207.9435 2letitbee@sbcglobal.net
BIG RIVERS BEEKEEPERS ASSOCIATION Dave Feltes ~ Morrison, IL Phone: 815.772.3413 dfeltes@thewisp.net
CENTRAL EASTERN ILLINOIS BEEKEEPERS ASSOCIATION Lorraine Wirges ~ Rantoul, IL momwirges@aol.com
COOK-DUPAGE BEEKEEPERS ASSOCIATION Marilyn Ellison ~ Homer Glen, IL Phone: 815.931.4389 marilynell@aol.com
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KANKAKEE RIVER VALLEY BEEKEEPERS ASSOCIATION Mike Rusnak www.krvba.blogspot.com

The IQI has a Chicago Director!
The IQI welcomes Garry Grube to the IQI board as the Chicago Director. He will be focusing on IQI needs specific to the Chicago area. He can be reached at ggrube@rcn.com or 312-497-6407.

The 4th Annual Fall Meeting of the Illinois Queen Initiative will be held **Saturday, October 12, 2013** from 9 AM to 4 PM at the Evergreen FS facility at 402 Hershey Road in Bloomington, IL. This is the same location as the 2011 fall meeting when it was owned by the Farm Bureau. This year's speaker is Dr. Jeff Harris Extension Apiarist for Mississippi State University and formerly a scientist for the USDA Honey Bee Lab in Baton Rouge, Louisiana. He will be speaking about honey bee breeding and introducing hygienic genetics to control varroa. Cost is \$30 for paid members; \$45 for non-members. Make check payable to the IQI and send reservations to treasurer Carolyn Gerberding, 1 Vernon Dr., Rochester, IL 62563. Direct questions to her at cboy8307@aol.com or 217-498-8307.

The Illinois State Fair is August 8-18, 2013, 9am - 5pm in the Illinois Building of the State Fair Grounds in Springfield. Gander at an observation hive and the beautiful displays of honey bee products from throughout the state! Taste a cup of famous honey ice cream! Say hello to **Larry Roth, the new Superintendent of the Illinois Honey Show**. To schedule volunteer time or for more details, contact Janet Hart, harthoney@msn.com.

Congratulations, Bernie and Helen DeVries for receiving the **Pioneer Award** and an **ISBA lifetime membership!** Your passion and dedication has



contributed immeasurably to Illinois beekeeping!

LAKE COUNTY BEEKEEPERS ASSOCIATION David Bergman ~ Grayslake, IL bergda@ipc.org www.lakecobeekeepers.com
LINCOLN LAND BEEKEEPERS ASSOCIATION Steve Petrilli ~ Springfield, IL Phone: 217.638.7891 s.petrilli@comcast.net
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WILL COUNTY BEEKEEPERS ASSOCIATION Darien Kruss ~ Joliet, IL Phone: 630.557.6233 info@willbees.org

A Good Hobby, cont.

“You’re not a qualified beekeeper unless you’ve been stung numerous times,” he said.

Bernie has helped many people get started in beekeeping and gave many demonstrations to students in Antioch schools and in neighboring towns. He has exhibited his honey at the Lake County Fair and is a long-time member of the Lake County Beekeepers Association. Helen has been by his side every step of the way, including those times when they would drive to Watertown, WI, to pick up a shipment of bees for themselves and other Lake County beekeepers. She served as treasurer of the Lake County Beekeepers

Bernard and Helen DeVries

Association for many years. Although Bernie turned his hobby over to daughter and son-in-law Christine and Kenneth Smith of Waukegan in 2003, bee hives belonging to a fellow beekeeper can still be seen in the backyard, a testament to the fact that Bernie has started many people into the joys of beekeeping, just as someone many years ago got him started.

Bernie and Helen DeVries have lived in Antioch since 1963 when Bernie retired from the U.S. Navy, and he worked as a welder at International Harvester in Libertyville for many years. They have four daughters, all of whom live in Lake County, and many grandchildren and great-grandchildren.



Illinois State Beekeepers Association

P.O. Box 21094

Springfield IL 62703

**Honey bees in
your spray area?
illinoisbees.com**



Membership in the Illinois State Beekeepers Association is open to all persons interested in bees and beekeeping. Beekeepers are urged to join through their local associations or individually if no local associations are available. Dues for 2012 are \$10 for the calendar year January 1 through December 31 only. Dues include a subscription to this newsletter, the ISBA Bulletin. Beekeeping journals are available to ISBA members at about 25% discount. Mention membership in ISBA when sending your subscription payment to the publishers. Rates are subject to change without prior notice.

Make checks for membership payable to: Illinois State Beekeepers Association and mail to: Mike Mason, Treasurer, P.O. Box 21094, Springfield, IL 62703.

Address Changes: Send old and new address six weeks prior to date of change when practical to the association secretary.

Reduced Journal Rates for 2013 (members only)

	<u>1 yr</u>	<u>2 yr</u>	<u>3 yr</u>
<u>American Bee Journal</u>	19.50	37.00	52.15
<u>Bee Culture</u>	21.00	38.00	N/A

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